

# CC300-20/CC330-20

**Craft ROBO**

## USER'S MANUAL

MANUAL NO. CC300m-UM-151



**GRAPHTEC**

## PREFACE

Thank you for purchasing the Craft ROBO CC300-20/CC330-20. Based on cutting-plotter technology developed by Graphtec over many years, CC300-20/CC330-20 provides outstanding flexibility in operation. It can be used for cutting heavy cardstock, paper and sticker film as well as pen plotting. Please read this manual thoroughly and assure proper use of the equipment.

\* In this manual, screens that appear when CC330-20 is connected to Windows Vista are used.

This product is manufactured and sold pursuant to a license under Gerber Scientific International, Inc.'s U.S. Patent No. 5,537,135 and its foreign counterparts.

### Warning

Only computers or peripherals (computer input/output devices, terminals, printers, etc.) certified as complying with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules, may be attached to this product when this product is operated in a residential environment. Operation with non-certified peripherals is likely to result in interference to radio and TV.

### Federal Communications Commission Radio Frequency Interference Statement

"This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### Notes on this Manual

- (1) No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior written permission of Graphtec Corporation.
- (2) The product specifications and other information in this manual are subject to change without notice.
- (3) While every effort has been made to provide complete and accurate information, please contact your sales representative or nearest Graphtec vendor if you find any unclear or erroneous information or wish to make other comments or suggestions.
- (4) Notwithstanding the stipulations in the preceding paragraph, Graphtec Corporation assumes no liability for damages resulting from either the use of the information contained herein or the use of the product.

### Registered Trademarks

All names of companies, brands, logotypes, and products appearing in this manual are the trademarks or registered trademarks of their respective companies.

### Copyright

This User's Manual is copyrighted by Graphtec Corporation.

# CONTENTS

## PREFACE

Warning .....	i
Federal Communications Commission Radio Frequency Interference Statement.....	i
Notes on this Manual .....	i
Registered Trademarks .....	i
Copyright .....	i

## CHAPTER 1. PRIOR TO USE

1.1 Check All the Items .....	1-1
1.2 Craft ROBO Parts and Functions .....	1-2

## CHAPTER 2. CONNECTION AND PREPARATION

2.1 Connecting and Turning on the Power .....	2-1
2.2 Connecting to a Computer .....	2-2
2.3 Loading Media Using the Carrier Sheet.....	2-3
About the carrier sheet.....	2-3
Attaching media onto the carrier sheet .....	2-3
Loading the carrier sheet with media attached.....	2-5
How to unload the carrier sheet .....	2-7
Allowable cutting area of the carrier sheet .....	2-7
2.4 Loading Media without Using the Carrier Sheet (CC330-20 Only) .....	2-8
Media loading method .....	2-8
How to unload the media.....	2-9
Allowable cutting area .....	2-9
2.5 Adjusting and Mounting the Blade Plunger .....	2-12
Blade plunger construction .....	2-12
Blade adjustment caps and media selection.....	2-12
Changing the blade adjustment cap .....	2-13
Mounting the blade plunger.....	2-14
2.6 Mounting a ballpoint pen.....	2-15
Acceptable ballpoint pens.....	2-15
Mounting the ballpoint pen .....	2-16
2.7 What to Do if This Happens.....	2-17

## CHAPTER 3. CRAFT ROBO CONTROLLER

3.1 System Requirements .....	3-1
3.2 Installing the Craft ROBO Controller.....	3-1
Starting up the installer .....	3-1
Installing the Craft ROBO Controller.....	3-3
Installing the Craft ROBO Driver .....	3-4
3.3 Starting up the Craft ROBO Controller .....	3-5
Starting up from the Windows [Start] menu .....	3-5
Starting up from Craft ROBO-compatible software (such as ROBO Master).....	3-6
3.4 Craft ROBO Controller Operations.....	3-7
Cutting your design .....	3-7
Printing your design on a printer, and then using the Craft ROBO to cut it (CC330-20 only)....	3-7
Test Plotting.....	3-9
Performing a test cut and creating a Media Type setting .....	3-9

3.5	Craft ROBO Controller Settings.....	3-10
3.6	Error Messages .....	3-18

## CHAPTER 4. CUTTING DATA SAVED ON SD CARD

4.1	Introduction .....	4-1
4.2	Operations .....	4-1
	Cutting with the tool conditions set in the previous cutting .....	4-2
	Cutting with new tool conditions.....	4-3
	Cutting the same image repeatedly (Copy) .....	4-5
	Changing the LCD language .....	4-7
4.3	Error Messages .....	4-7

## APPENDIX

Appendix A. Standard Specifications.....	A-1
--	-----

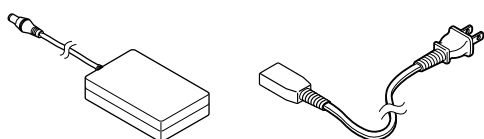
INDEX .....	I-1
-------------	-----

# CHAPTER 1. PRIOR TO USE

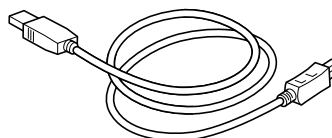
## 1.1 Check All the Items

Referring to the list below, check to confirm that all the components are included with your product. If any item is missing, please contact your place of purchase.

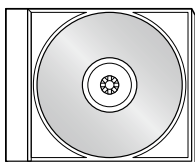
AC adapter, Power cable ....1 set



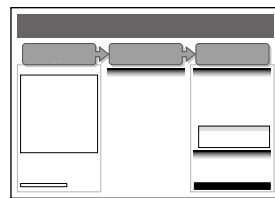
USB cable ....1



Craft ROBO Software CD-ROM ....1



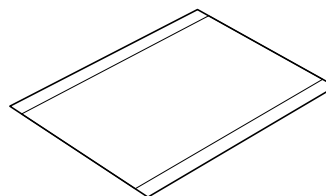
Setup Instruction Sheet ....1



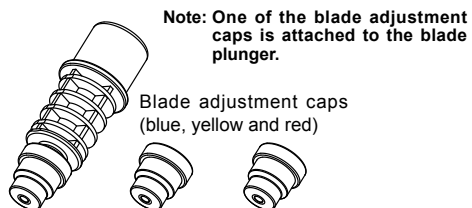
Quick Application Guide ....1



Carrier sheet ....1



Blade plunger (with blade adjustment caps) ....1 set



Note: One of the blade adjustment caps is attached to the blade plunger.

Blade adjustment caps  
(blue, yellow and red)

CR09308 is a carrier sheet designed for the CC300 and CC330 with Standard Tac. Recommended for use with ( $\sim 0.1\text{mm}/5\text{mil}$ ) flat, smooth surface media such as: photo paper, copy paper, inkjet print paper, etc.

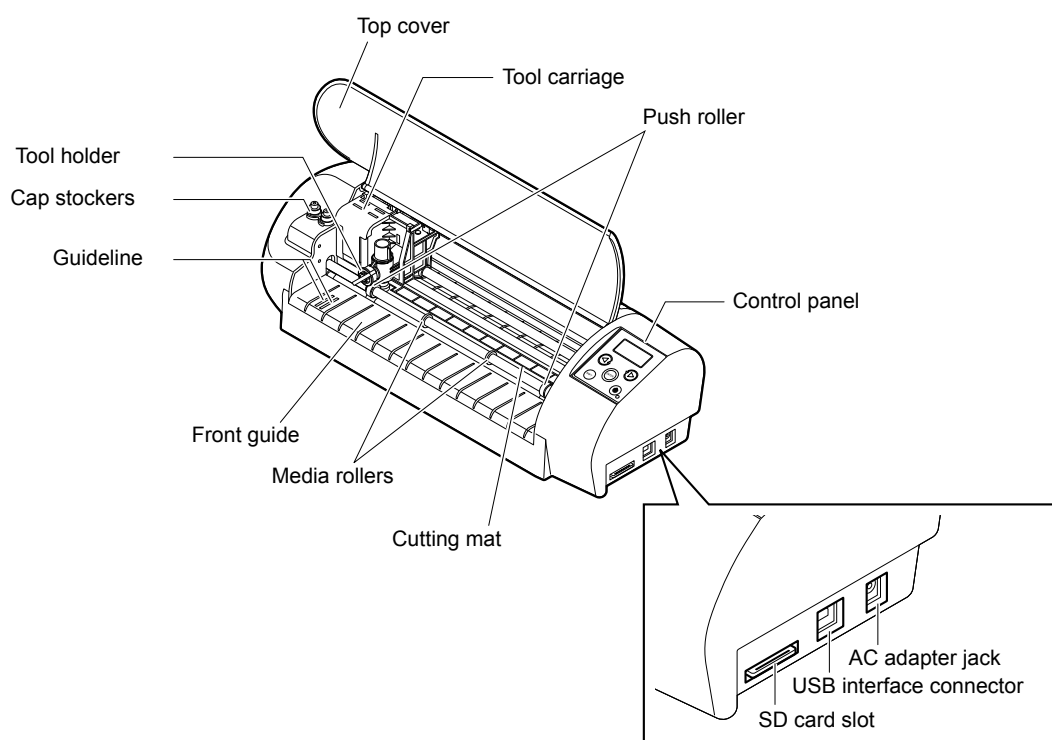
\*Keep carrier sheet clean and free of dust, hair, fibers, etc.

CR09309 is a carrier sheet designed for the CC300 and CC330 with Xtra Tac. Recommended for use with ( $\sim 0.2\text{mm}/10\text{mil}$ ) flat, smooth or textured surface media such as: Bazzill paper, Kent paper, etc.

\*Keep carrier sheet clean and free of dust, hair, fibers, etc.

## 1.2 Craft ROBO Parts and Functions

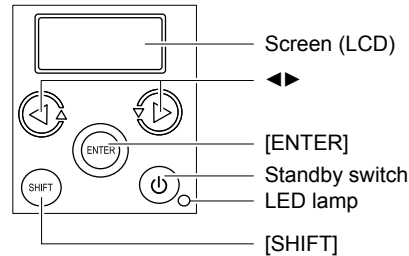
### Main Unit



- Top cover**.....Open this cover when setting the tool or media. Be sure to close it during cutting.
- Tool carriage**.....Drives the tool holder to the left or right.
- Push rollers**.....Holds the media in place against the media rollers.
- Tool holder**.....Holds the tool and drives it up or down.
- Cap stockers**.....Used to place the blade adjustment caps that are not used.
- Guideline**.....Used as a guide when media is loaded.
- Front guide**.....Used as the work surface.
- Media rollers**.....Moves the media back and forth.
- Cutting mat**.....Cutting or plotting is performed on this surface.
- Control panel**.....Used to operate the Craft ROBO when cutting data saved on an SD memory card.
- AC adapter jack**.....Used for connecting the AC adapter cable.
- USB interface connector**.....Used for connecting the USB cable.
- SD card slot**.....Insert an SD card.

## Control Panel

This section explains the function of lamps and keys on the control panel.



**Screen (LCD)**.....Displays the menu.

◀▶ .....Moves the tool carriage and media when <Start Point> is displayed on the screen, and selects the menu item or sets the value during menu operation.

**[ENTER]**.....Enters the selected menu or defines the setting. In the Test Cut screen, which is displayed only when the SD card is set in the SD card slot, press [ENTER] while holding down [SHIFT] to perform a test cut.

**Standby switch**.....Sets the Craft ROBO in and out of the standby status.

**LED lamp**.....Lights green when the Craft ROBO is in standby status.

**[SHIFT]**.....When <Start Point> is displayed on the screen, press ◀ while holding down [SHIFT] to feed the media toward the front of the main unit, or press ▶ while holding down [SHIFT] to feed the media toward the back of the main unit. To perform a test cut, press [ENTER] while holding down [SHIFT], when the Test Cut screen is displayed.



You can operate the control panel keys only when the Craft ROBO is in standby status.

# CHAPTER 2. CONNECTION AND PREPARATION

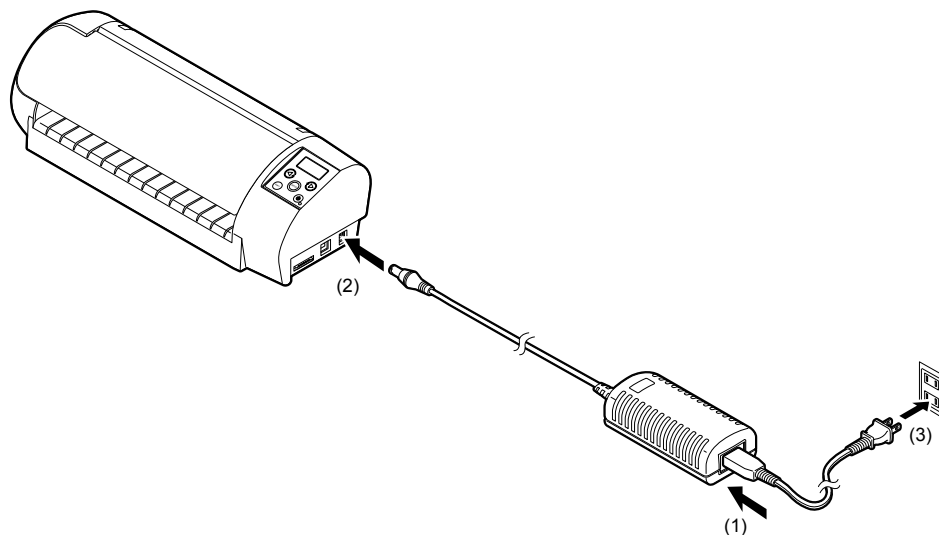
## 2.1 Connecting and Turning on the Power

Use the AC adapter and the power cable provided with the Craft ROBO to connect the AC adapter jack on the Craft ROBO to an AC outlet of the rated voltage, and then turn on the power.

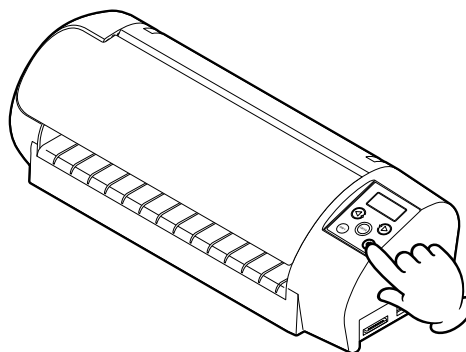


Always connect the AC adapter to the AC adapter jack before connecting the power cable to the AC outlet.

- (1) Connect the power cable (included with the AC adapter) to the AC adapter.
- (2) Plug the AC adapter cable into the AC adapter jack of the Craft ROBO.
- (3) Plug the other end of the power cable into the AC outlet.



- (4) Press the standby switch.  
When the Craft ROBO is in standby status, the LED lamp is lit green.  
When the Craft ROBO is not in standby status, the LED lamp is extinguished.





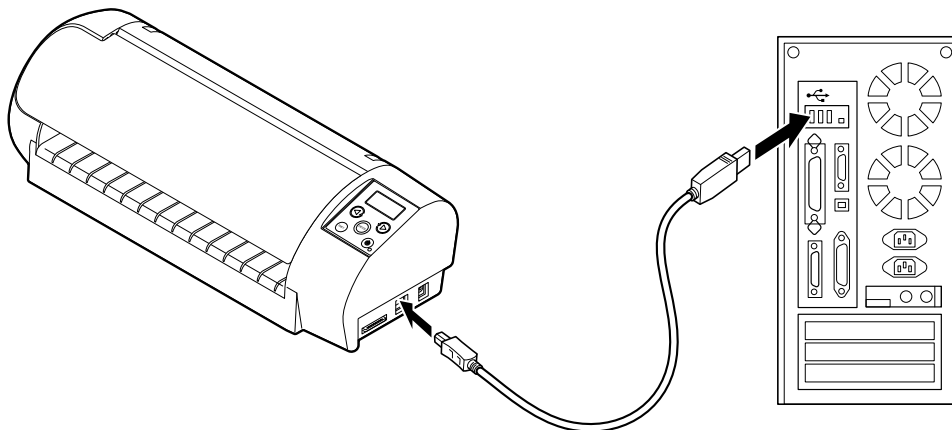
## 2.2 Connecting to a Computer

Use the USB cable provided with the Craft ROBO to connect the Craft ROBO to a computer.

### CHECKPOINT

- Install the software for the Craft ROBO before connecting the Craft ROBO to a computer. (See Chapter 3.2, "Installing the Craft ROBO Controller".)
- Do not connect the USB cable until instructed to do by an on-screen prompt.

The USB cable has different plug shapes on the computer side and the Craft ROBO side. Always check which plug connects to which side.



### CHECKPOINT

- Do not connect two or more Craft ROBO units to one computer.
- Do not connect the Craft ROBO and a Graphtec plotter to a computer at the same time. If you do so, the Craft ROBO may not operate properly.

## 2.3 Loading Media Using the Carrier Sheet



In this manual, the term "media" refers to paper, film, and other materials to be cut or printed on.

### About the carrier sheet

The carrier sheet allows you to cut media smaller than 210 mm x 305 mm, and cut right through the media.



- For the CC300-20, be sure to use the carrier sheet at all times.
- For the CC330-20, be sure to use the carrier sheet when cutting right through the media, or when cutting the media without a backing sheet (linear).
- The carrier sheet is reusable, and so it can be used repeatedly. When its adhesive power becomes weak, however, replace it with a new carrier sheet.
- The carrier sheet is a consumable. Replace it after cutting approximately 10 sheets. Using a carrier sheet for more than 10 sheets may cause misaligned cutting or other problems. Be sure to replace it with a new carrier sheet after cutting 10 sheets.
- Pulling the carrier sheet out of the Craft ROBO may shorten its lifetime or cause misaligned cutting. Be sure to select <Unload Media> menu on the control panel and press [ENTER] to remove the carrier sheet.
- The meshes printed on the carrier sheet allows you to check the media size. You can also display the meshes of the carrier sheet on the ROBO Master screen to confirm the cutting area. For further details, please refer to the ROBO Master User's Manual.
- Remove copying or ink-jet printing paper from the carrier sheet carefully. Pulling off the paper roughly may tear the paper or leave pieces of paper on the carrier sheet.

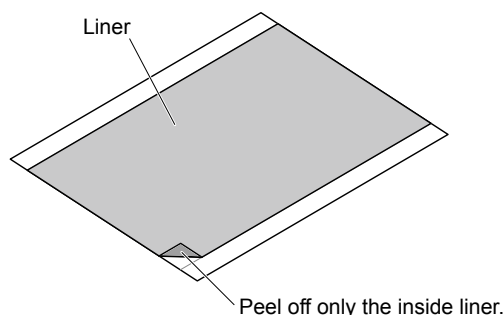
### Attaching media onto the carrier sheet

#### Using the carrier sheet for media with a width of 190 mm or smaller



Do not use media smaller than postcard size.

- (1) Peel off only the inside liner (off-white) of the carrier sheet, so that the adhesive surface is visible. (Do not peel off the liner strips on both sides.)



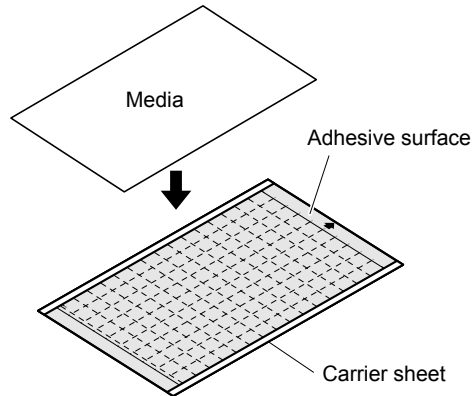
- (2) Press the media onto the adhesive surface of the carrier sheet.

When cutting horizontal images, fit the lower-left corner of the media to the ▼ mark at the upper-left corner of the carrier sheet.

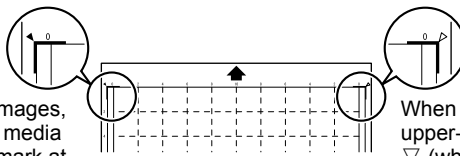
When cutting vertical images, fit the upper-right corner of the media to the ▽ mark at the upper-right corner of the carrier sheet.

**CHECKPOINT**

- When pressing the media onto the adhesive surface, be careful not to cause air bubbles or wrinkles in the media.
- Make sure that the edges of the media are parallel to the meshes of the carrier sheet.



When cutting horizontal images, fit lower-left corner of the media to the ▼ (black triangle) mark at the upper-left corner of the carrier sheet.



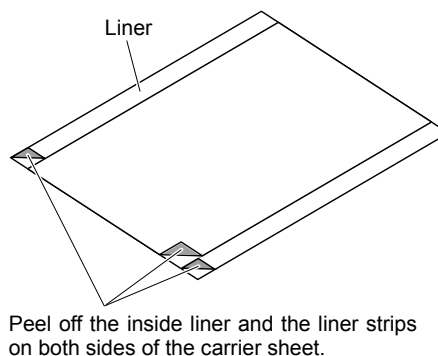
When cutting vertical images, fit upper-right corner of the media to the ▽ (white triangle) mark at the upper-right corner of the carrier sheet.

### Using the carrier sheet for media from 191 to 270 mm in width (equivalent to A4 size)

**CHECKPOINT**

You can set media up to 270 mm in width. However, the allowable cutting area is the same as that of the carrier sheet. (Please see "Allowable cutting area of the carrier sheet.")

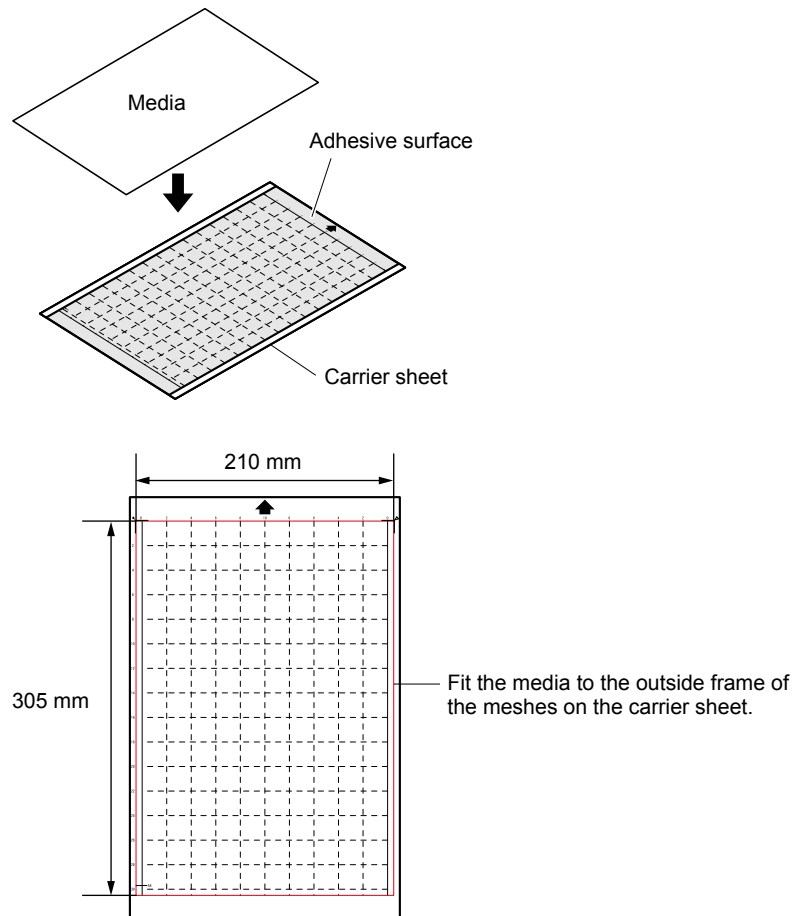
- (1) Peel off the inside liner and the liner strips on both sides of the carrier sheet, so that the entire adhesive surface is visible.



- (2) Press the media onto the adhesive surface of the carrier sheet.  
Fit the media to the outside frame of the meshes on the carrier sheet.

**CHECKPOINT**

- When pressing the media onto the adhesive surface, be careful not to cause air bubbles or wrinkles in the media.
- Make sure that all of the media is pressed down.
- Make sure that the edges of the media are parallel to the meshes of the carrier sheet.



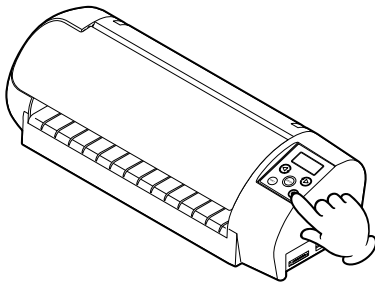
### Loading the carrier sheet with media attached

When using media smaller than 210 mm x 305 mm, always affix the media within the allowable cutting area.



- Do not use media smaller than postcard size.
- For details about the allowable cutting area of the carrier sheet, please refer to "Allowable cutting area of the carrier sheet."

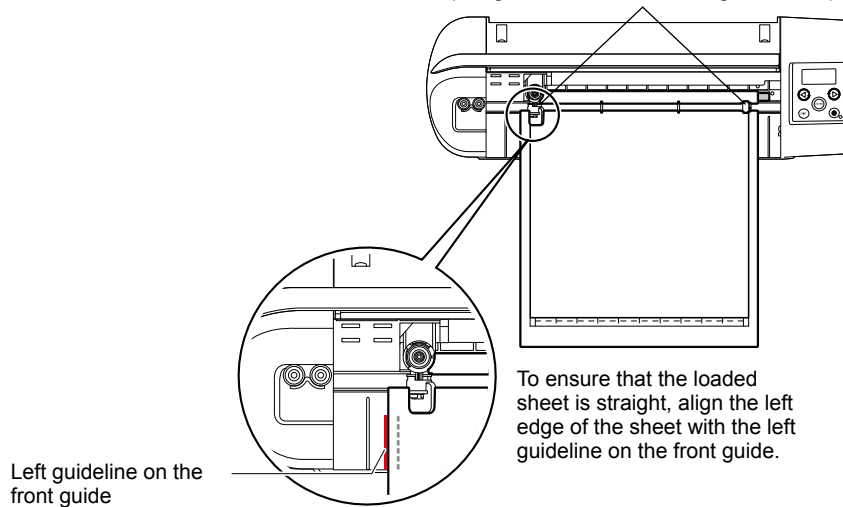
- (1) Press the standby switch and confirm that the LED lamp is lit (green).



- (2) Load the carrier sheet with media attached in the Craft ROBO.

Align the left edge of the sheet with the left guideline on the front guide. Place the top edge of the sheet against both push rollers, making sure that the sheet is straight.

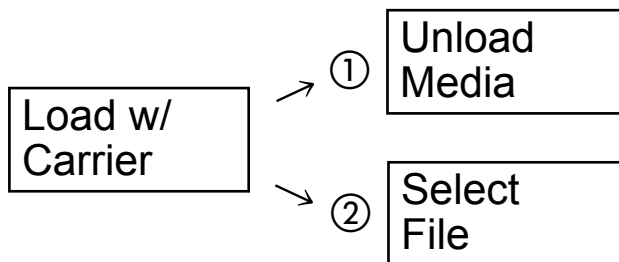
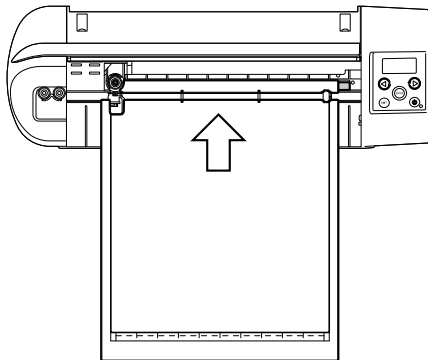
Place the top edge of the carrier sheet against both push rollers.



- (3) Make sure that <Load w/ Carrier> is displayed on the screen of the control panel, and press [ENTER].



For the CC330-20, press ◀ or ▶ on the control panel to select <Load w/ Carrier>, and press [ENTER].



- ① When the SD card is not set in the SD card slot  
 ② When the SD card is set in the SD card slot

The Craft ROBO feeds the carrier sheet automatically.

### How to unload the carrier sheet

Press ► to select <Unload Media>, and press [ENTER].



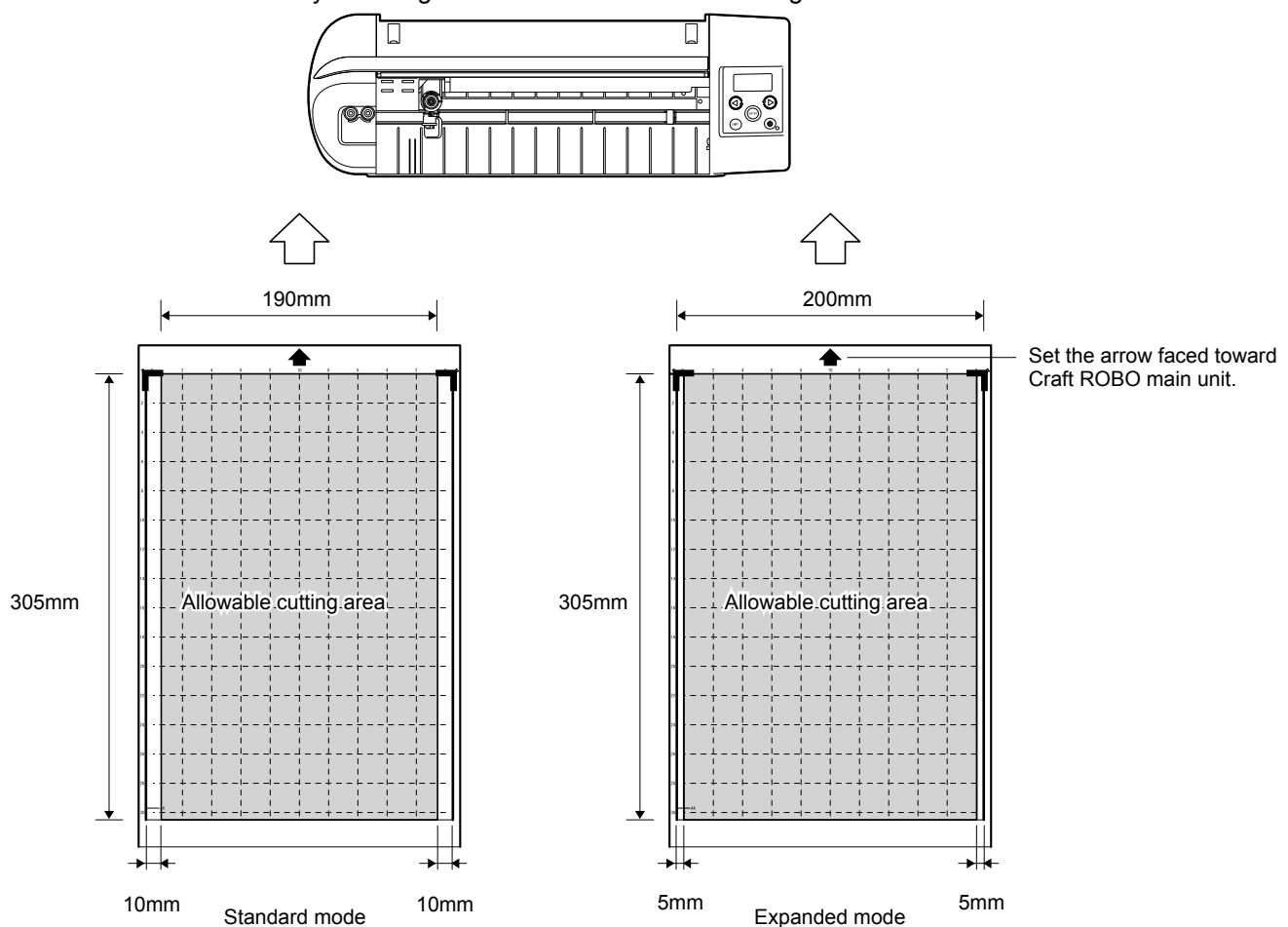
The carrier sheet is output toward the front of the main unit.



When cutting is finished, <Unload Media> is displayed on the screen. In this case, just press [ENTER] to unload media.

### Allowable cutting area of the carrier sheet

Make sure that your design fits within the allowable cutting area indicated below.



- Follow the procedure below to change the mode from Standard to Expanded or vice versa. The default setting is "Standard" mode.

1. In the Control Panel, open "Printers" ("Printers and Faxes" for Windows XP).
2. Open "Properties" for Graphtec CC300 or CC330.
3. Click [Printing Preferences] in the "General" tab.
4. Select the desired mode in "Margins" on the "Basic Setup" tab.

(If you create the cut data using the ROBO Master or Cutting Master 2, the [Expanded] mode is selected.)

- The allowable cutting area indicated above is applicable only when the media is set correctly.

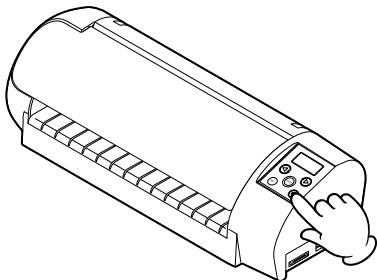
## 2.4 Loading Media without Using the Carrier Sheet (CC330-20 Only)



If the media size is smaller than A4 size, be sure to use the carrier sheet. (Please see Section 2.3, "Loading Media Using the Carrier Sheet".)

### Media loading method

- (1) Press the standby switch and confirm that the LED lamp is lit (green).

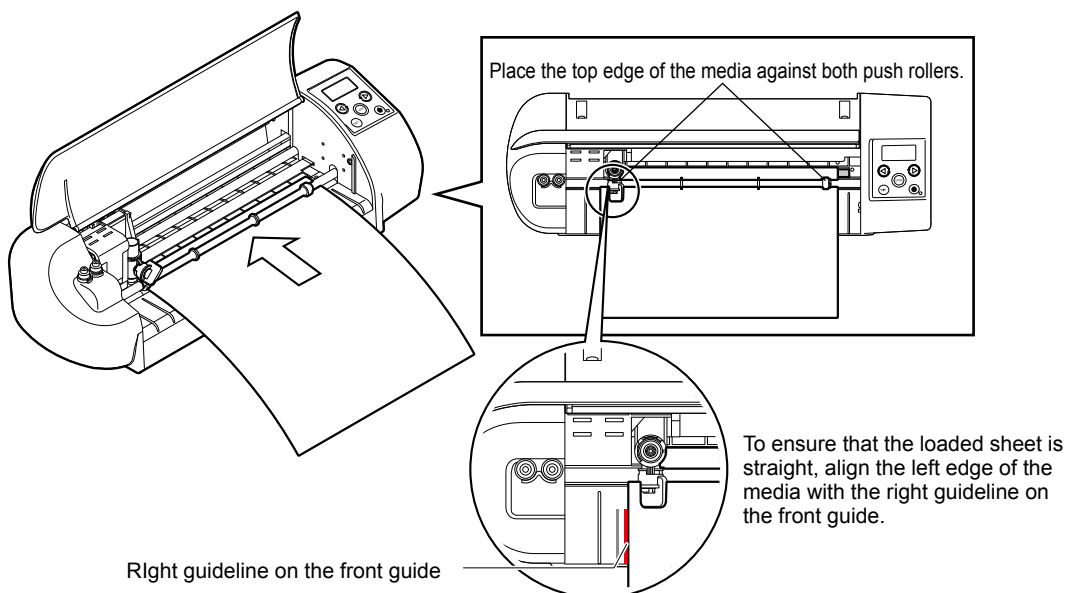


- (2) Load the media in the Craft ROBO.

Align the left edge of the media with the right guideline on the front guide. Place the top edge of the media against both push rollers, making sure that the media is straight.



- If a media wider than 220 mm is loaded, the guideline will be covered by the media. However, if the media is loaded so that its top edge touches and is parallel to both the push rollers, it will be straight.
- Please straighten rolled or curled media before loading the media into the Craft ROBO CC300-20/CC330-20. To straighten rolled material, please roll the media in the opposite direction, and then try reloading the media into the Craft ROBO.



If you are using media that is not A4 size, please follow the instructions given below.

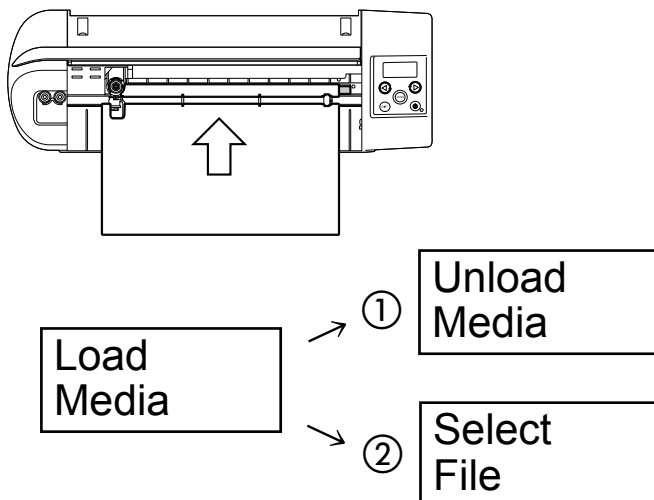
- **If the media width is between 210 and 270 mm**

If the width of the media is between 210 and 270 mm, the only types of media that can be loaded are vinyl films or sticker sheets.

- **If the media length is between 297 and 1,000 mm**

The accuracy specification is guaranteed for media that measure 210 x 297 mm, but if the media is film (with a thickness of 0.1 mm or less, and 0.3 mm or less including the backing sheet (liner)), lengths up to 1,000 mm can be loaded.

- (3) Press ◀ or ▶ on the control panel to select <Load Media>, and press [ENTER].

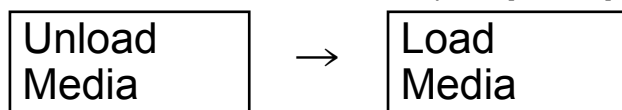


- ① When the SD card is not set in the SD card slot  
 ② When the SD card is set in the SD card slot

The Craft ROBO feeds the media automatically.

### How to unload the media

Press ▶ to select <Unload Media>, and press [ENTER].



The media is output toward the front of the main unit.



When cutting is finished, <Unload Media> is displayed on the screen. In this case, just press [ENTER] to unload media.

### Allowable cutting area

Make sure that your design fits within the allowable cutting area indicated below.

#### **If the media is A4 size**

Standard mode: The width of the allowable cutting area is 190 mm.

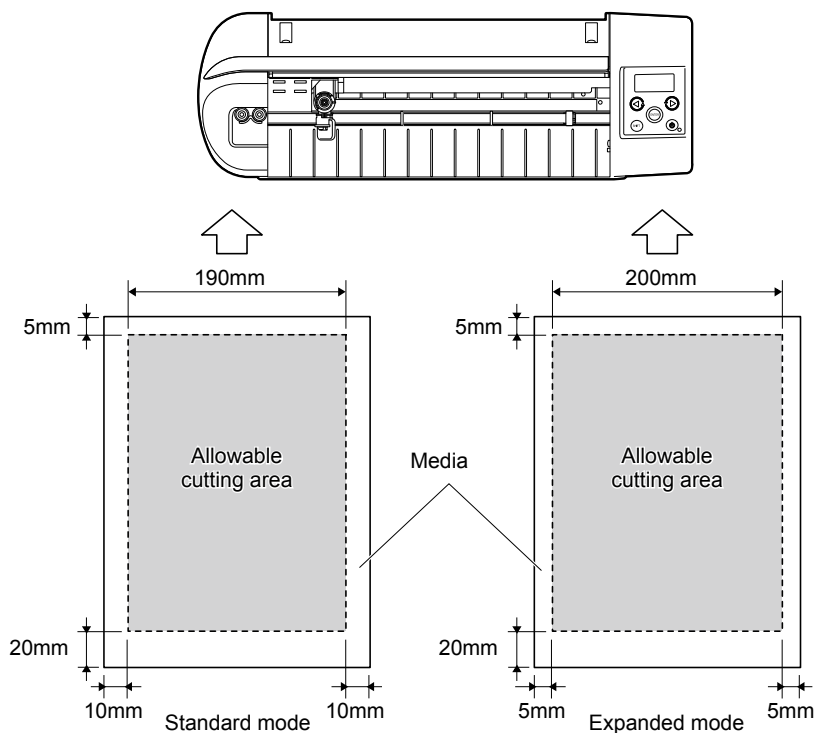
Expanded mode: The width of the allowable cutting area is 200 mm.

If registration marks are used, the allowable width is 190 mm.



- Follow the procedure below to change the mode from Standard to Expanded or viceversa. The default setting is "Standard" mode.
  - In the Control Panel, open "Printers" ("Printers and Faxes" for Windows XP).
  - Open "Properties" for Graphtec CC300 or CC330.
  - Click [Printing Preferences] in the "General" tab.
  - Select the desired mode in "Margins" on the "Basic Setup" tab.  
 (If you create the cut data using the ROBO Master or Cutting Master 2, the [Expanded] mode is selected.)
- The allowable cutting area indicated above is applicable only when the media is set correctly.





#### If the media width is between 210 and 270 mm

Even if the width of the media is larger than 210 mm, the allowable width is the same as that for an A4 size media (190 mm in Standard mode and 200 mm in Expanded mode).

Standard mode: The width of the allowable cutting area is 190 mm.

Expanded mode: The width of the allowable cutting area is 200 mm.

If registration marks are used, the allowable width is 190 mm.

#### CHECKPOINT

- Follow the procedure below to change the mode from Standard to Expanded or viceversa. The default setting is "Standard" mode.
  1. In the Control Panel, open "Printers" ("Printers and Faxes" for Windows XP).
  2. Open "Properties" for Graphtec CC300 or CC330.
  3. Click [Printing Preferences] in the "General" tab.
  4. Select the desired mode in "Margins" on the "Basic Setup" tab.  
(If you create the cut data using the ROBO Master or Cutting Master 2, the [Expanded] mode is selected.)
- The allowable cutting area indicated above is applicable only when the media is set correctly.

#### If the media length is between 297 and 1,000 mm

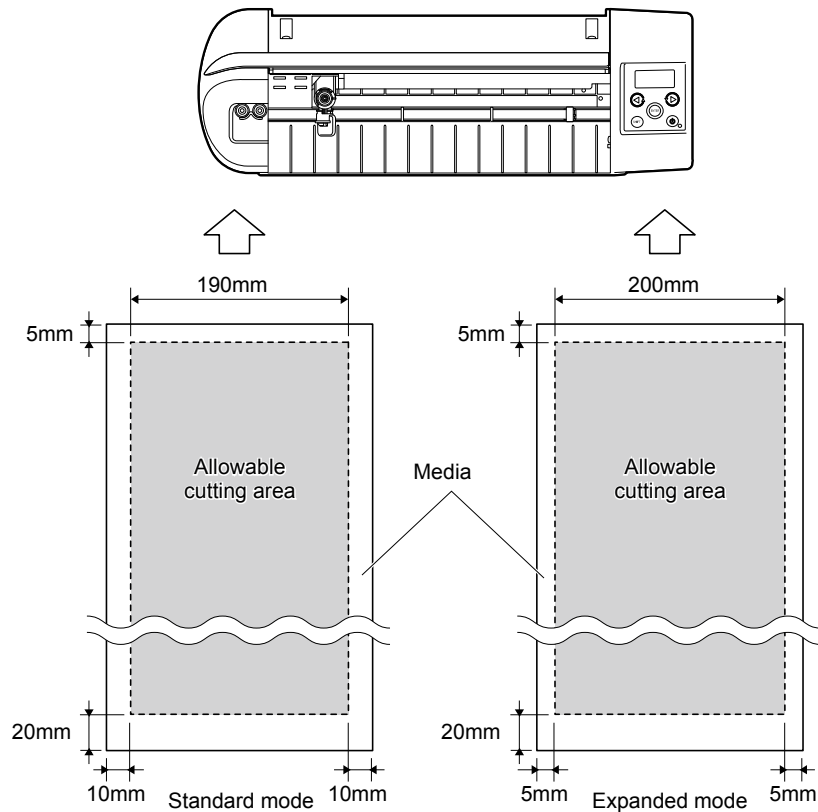
Standard mode: The width of the allowable cutting area is 190 mm.

Expanded mode: The width of the allowable cutting area is 200 mm.

If registration marks are used, the allowable width is 190 mm.

**CHECKPOINT**

- Follow the procedure below to change the mode from Standard to Expanded or viceversa. The default setting is "Standard" mode.
  1. In the Control Panel, open "Printers" ("Printers and Faxes" for Windows XP).
  2. Open "Properties" for Graphtec CC300 or CC330.
  3. Click [Printing Preferences] in the "General" tab.
  4. Select the desired mode in "Margins" on the "Basic Setup" tab.  
(If you create the cut data using the ROBO Master or Cutting Master 2, the [Expanded] mode is selected.)
- The allowable cutting area indicated above is applicable only when the media is set correctly.

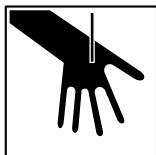


## 2.5 Adjusting and Mounting the Blade Plunger

The blade adjustment cap controls the blade length. To obtain optimum cutting results, select the blade adjustment cap for the blade plunger to suit the type of media to be cut.

### Caution

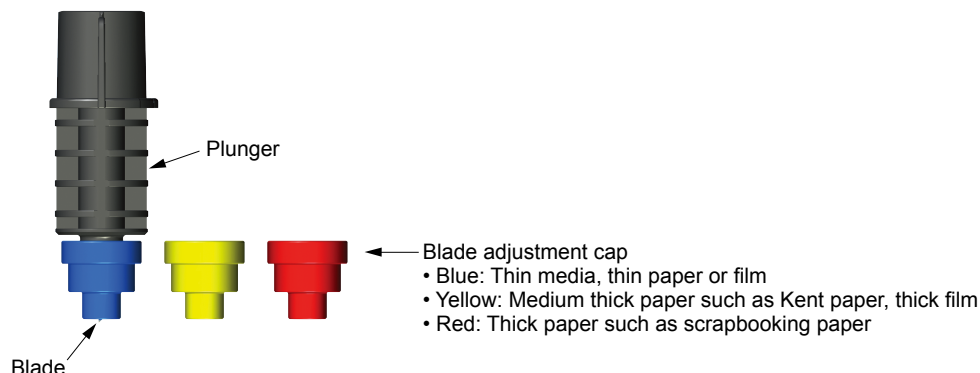
When handling the cutter blade, take care not to cut your hands.



### Blade plunger construction

The blade plunger consists of a plunger to which a cap containing a blade is attached. The length of the blade protruding from the cap can be adjusted by selecting one of the three available blade adjustment caps.

Select the blade adjustment cap best suited for the media you plan to use.



### Blade adjustment caps and media selection

Select and attach the blade adjustment cap best suited to the media you plan to use. To prevent damage to the cutting mat, the length of the blade protruding from the cap should not exceed the thickness of the media.

### Caution

When handling the cutter blade, take care not to cut your hands.

#### Selection guide for blade adjustment caps

Cap	Media	Protruding blade length (approx.)
Blue	Thin media, thin paper or film	0.1 mm
Yellow	Medium thick paper such as Kent paper, thick film	0.2 mm
Red	Thick paper such as scrapbooking paper	0.3 mm

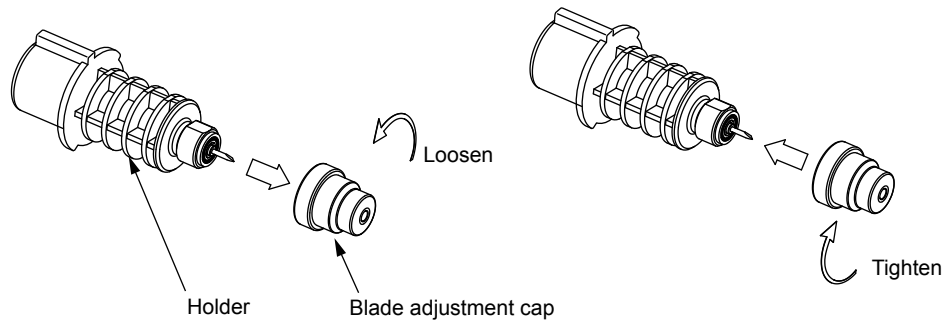
## Changing the blade adjustment cap

To prevent damage to the cutting mat, the length of the blade protruding from the cap should not exceed the thickness of the media.

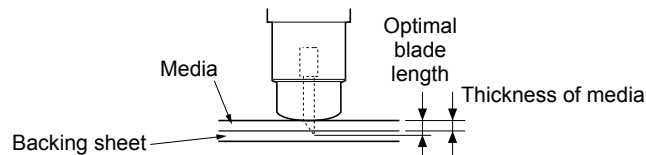
**Caution** When handling the cutter blade, take care not to cut your hands.

The blade adjustment cap is a screw-on type.

- (1) Turn the cap in the counterclockwise direction to remove it.
- (2) Replace it with the correct blade adjustment cap.
- (3) Turn the cap in the clockwise direction to tighten it.



The optimal blade length is less than the thickness of the media and backing sheet combined, but more than the thickness of the media. Make sure that blade length is never greater than the combined thickness of the media and its backing sheet. If it is not possible to accurately determine the media thickness, perform a cutting test for each blade adjustment cap in the order of blue, yellow, and red. The most suitable cap is the one where only faint traces of the blade appear on the backing sheet after the cutting test has been performed.



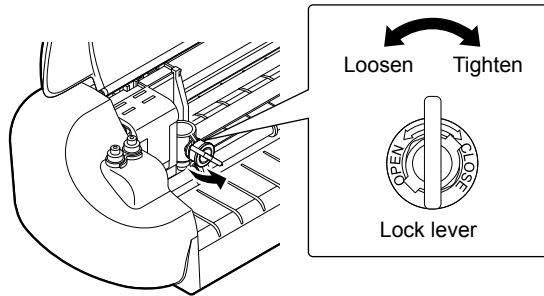
## Mounting the blade plunger

Mount the blade plunger that has had its protruding blade length adjusted (by selecting the most suitable blade adjustment cap) in the Craft ROBO.

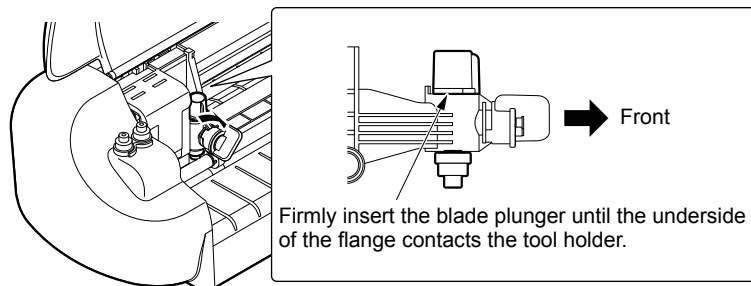
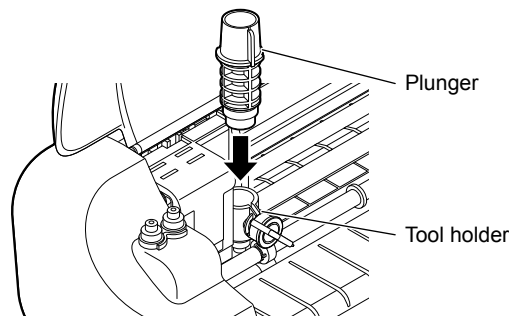
**Caution** When handling the cutter blade, take care not to cut your hands.

**CHECKPOINT** Be sure to grip the tool holder firmly when mounting or removing the blade plunger.

- (1) Turn the lock lever to the left (OPEN direction) to loosen the tool holder.



- (2) Firmly insert the blade plunger in the tool holder and then turn the lock lever to the right (CLOSE direction) to tighten the tool holder.



## 2.6 Mounting a ballpoint pen

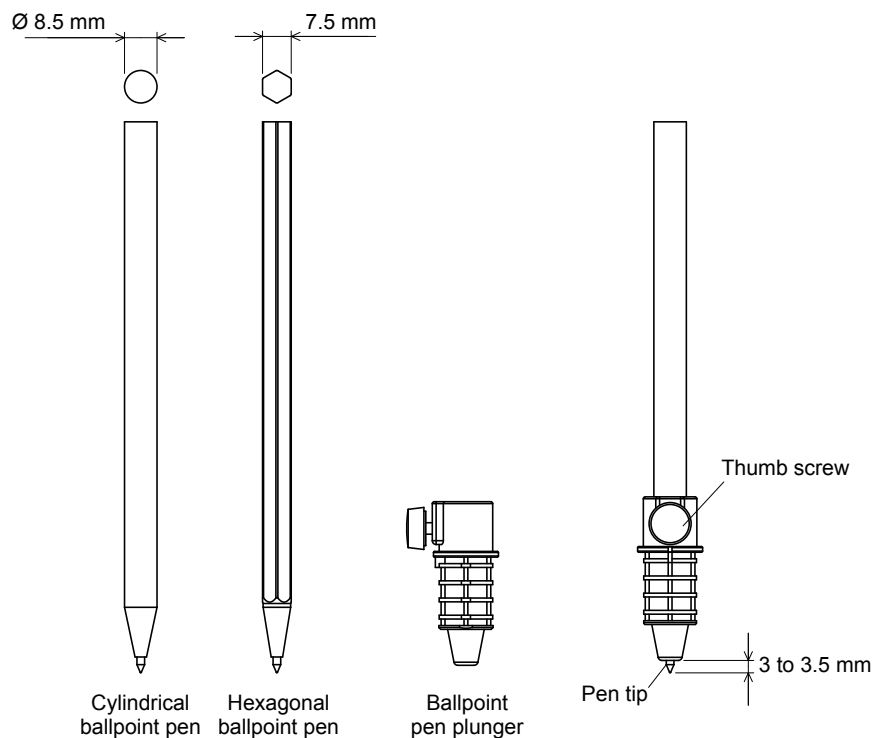


To mount a ballpoint pen, it is necessary to attach a ballpoint pen plunger (not supplied).

### Acceptable ballpoint pens

The ballpoint pen plunger accepts the following pen types:

- (1) Cylindrical ballpoint pens: Up to 8.5 mm in diameter
- (2) Hexagonal ballpoint pens: Up to 7.5 mm side-to-side
- (3) The tips of both pen types must extend between 3 to 3.5 mm past the ballpoint pen plunger's opening.



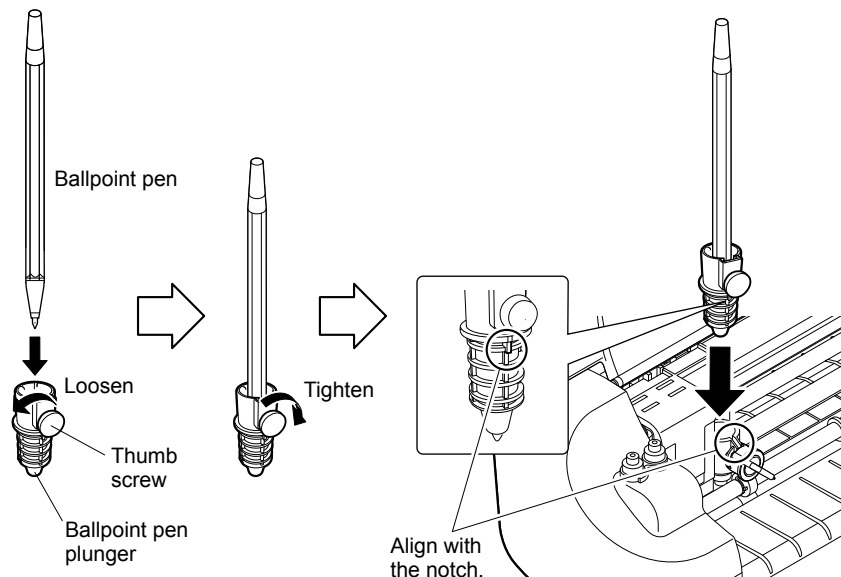
## Mounting the ballpoint pen

Mount a ballpoint pen into the ballpoint pen plunger and then mount the ballpoint pen plunger in the Craft ROBO's tool holder.

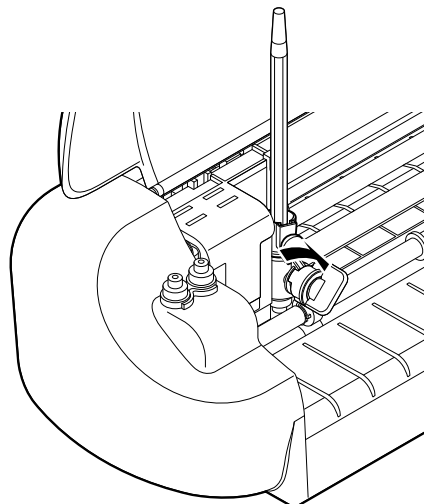


When mounting the ballpoint pen plunger, always align it with the notched part of the tool holder.

- (1) Loosen the thumbscrew on the ballpoint pen plunger by turning it counterclockwise.
- (2) Insert the ballpoint pen into the plunger.
- (3) Confirm that the tip of the ballpoint pen protrudes 3 - 3.5 mm from the plunger.
- (4) Tighten the thumbscrew by turning it clockwise.
- (5) Turn the lock lever to the left (OPEN direction) to loosen the tool holder.
- (6) Mount the ballpoint pen plunger in the tool holder while making sure that the protrusion on the plunger faces the front and that it is aligned with the notch in the tool holder.



- (7) When the pen plunger has been mounted, turn the lock lever to the right (CLOSE direction) to tighten it.







# CHAPTER 3. CRAFT ROBO CONTROLLER

The Craft ROBO Controller is a program that is used to perform all the basic settings such as selection of the Media Type and Craft ROBO operations such as test cutting.

## 3.1 System Requirements

The following system environment (higher environment than one your OS recommends) is required to use the controller.

- OS: Windows 2000, Windows XP or Windows Vista
- CPU: Pentium III 800 MHz or better
- Memory: 512 MB minimum
- Monitor: Must be capable of 1024 x 768 True Color display
- USB interface: USB 2.0 (Full Speed)
- Mouse
- CD-ROM drive



When installing the software, be sure to log on using an account with Administrator rights.

## 3.2 Installing the Craft ROBO Controller

This section describes how to install the software. Do not connect the Craft ROBO to your computer until instructed to do so by an on-screen prompt.



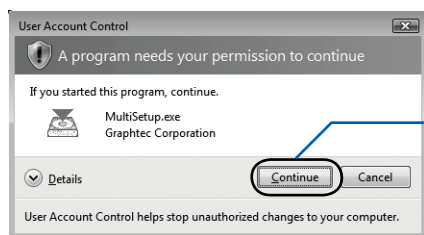
### Caution

- Do not connect the Craft ROBO to your computer until instructed to do so by an on-screen prompt.
- If the Craft ROBO Controller has already been installed, select "Control Panel" → "Programs and Features" ("Add or Remove Programs" for Windows XP, or "Add/Remove Programs" for Windows 2000), and then uninstall the program before performing the setup operation.
- Be sure to close any open Windows applications before installing the software.

### Starting up the installer

(1) Set the supplied CD-ROM into the CD-ROM Drive of your computer.

The [User account control] screen of software appears.



Click [Continue].

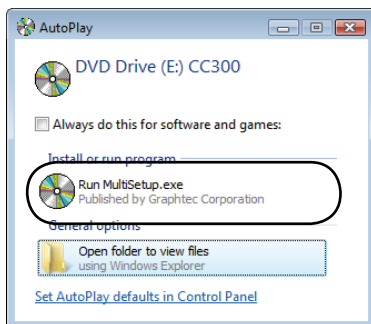
When you click [Continue], [Start] window shown below will be displayed. If this window is not displayed, open "My Computer" and double-click "CD Drive". If the "Start" window still does not appear, execute "MultiSetup.exe" included in the CD-ROM.



### When auto play of software is not set

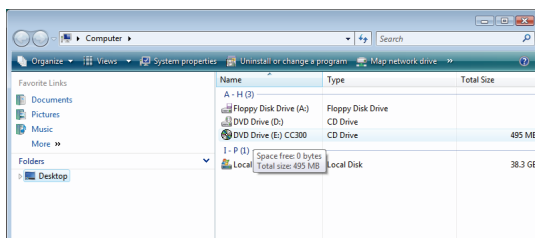
- For Windows Vista:

1. Select [Run MultiSetup.exe] from [Autoplay] Selection menu of Windows.

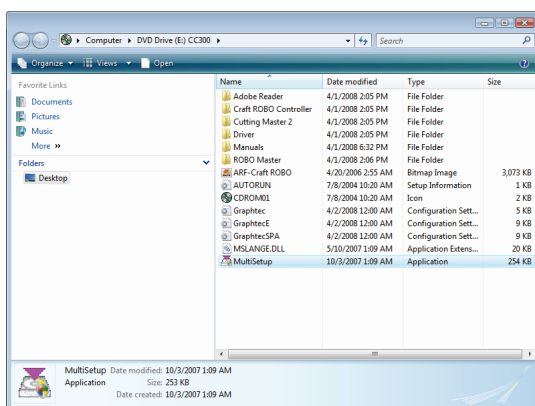


- When [Autoplay] Selection menu does not appear:

1. Select the CD-ROM Drive from Computer, and select [Open] with a right click.



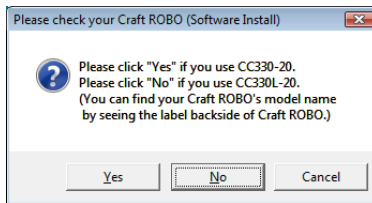
2. Double-click [MultiSetup.exe].



- \* For Windows XP/2000, operate in the same manner.

(2) Click the [Craft ROBO Lite (CC300-20/CC300L-20) Software Install] or [Craft ROBO (CC330-20/CC330L-20) Software Install] button according to your model.

(3) Select your model.



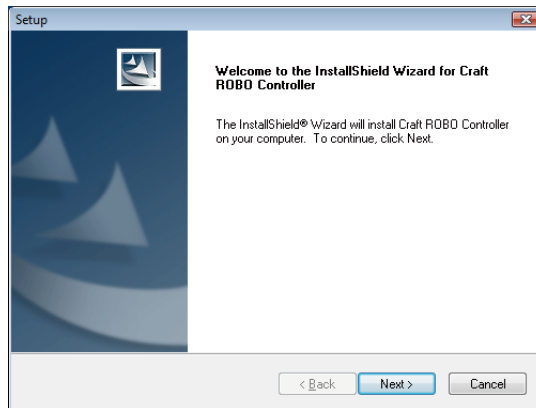
Click [Yes] or [No] to continue.

The installer of "ROBO Master," the software used for Print & Cut, starts up.

When the installation of ROBO Master is finished or cancelled, the installer of the Craft ROBO Controller start up.

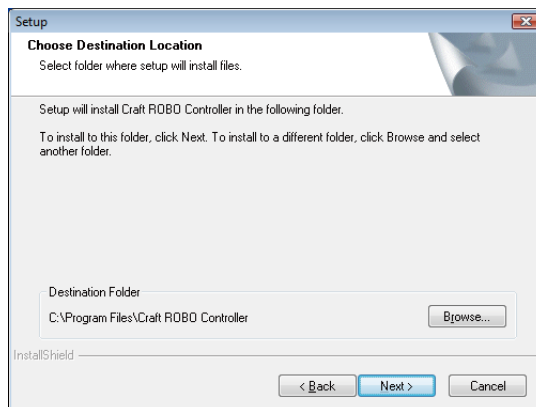
### Installing the Craft ROBO Controller

(1) When the installer starts up, the screen shown below is displayed first.



Click [Next] to proceed.

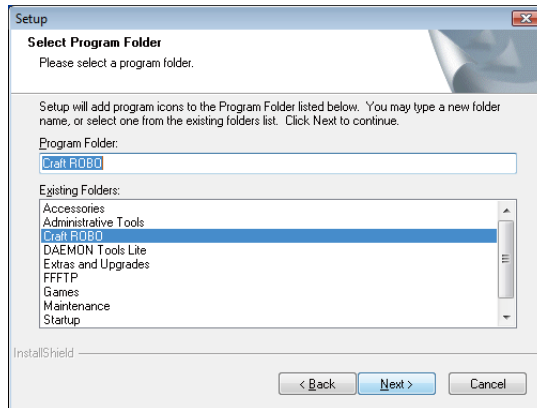
(2) Next, a "Choose Destination Location" screen will be displayed.



Select the folder in which the Controller is to be installed.

Unless the folder shown by default does not have sufficient free space, it is normally not necessary to change it. If there is no need to change the default folder, click [Next] to proceed.

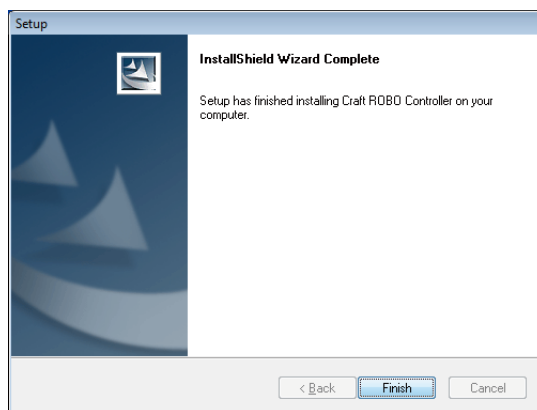
(3) Next, a "Select Program Folder" screen will be displayed.



Select the program folder in which the program icon is to be placed.

To place the program icon in a new folder, enter a new folder name in "Program Folder." To add the program icon to an existing folder, select one from the list of "Existing Folders." A new folder named "Craft ROBO" is prepared by default. If there is no need to change the default folder, click [Next]. File copying starts.

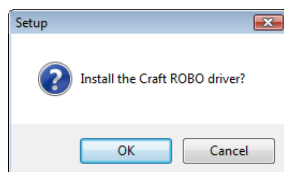
- (4) When the system has finished copying files, a "InstallShield Wizard Complete" screen is displayed indicating that installation is complete. Click [Finish] to complete the installation.



The system will then proceed to install the "Craft ROBO driver".

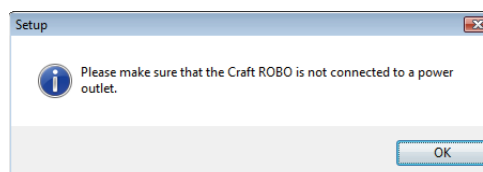
### Installing the Craft ROBO Driver

- (1) When the installation of the Craft ROBO Controller is finished, the screen below is displayed.



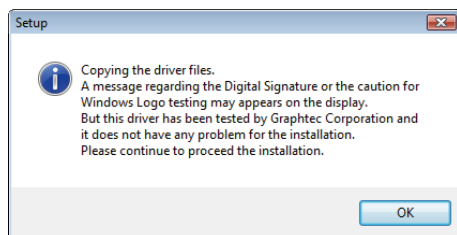
Click [OK] to continue.

- (2) The screen below is displayed.



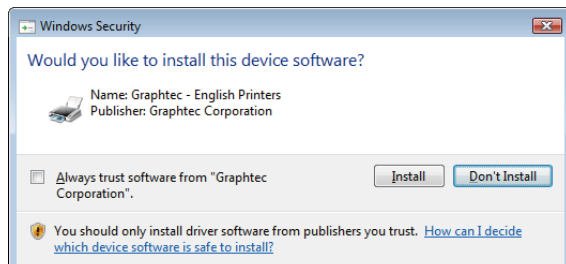
Make sure that the Craft ROBO is not connected to your computer, and click [OK] to continue.

- (3) The screen below is displayed.



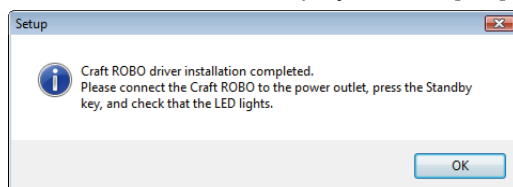
Click [Install] to continue.

- (4) The screen below is displayed.



Click [Install] to continue.

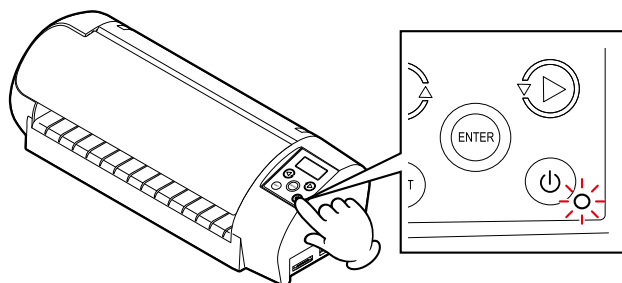
- (5) If the screen below is displayed, click [OK] to restart your computer.



## 3.3 Starting up the Craft ROBO Controller

The Craft ROBO Controller can be started up from the [Start] menu on the Windows desktop or from the Craft ROBO-compatible software such as ROBO Master.

- (1) Press the Standby switch on the Craft ROBO, and check that the LED lamp is lit (green).
- (2) Check that the Craft ROBO and your computer are connected by a USB cable.



### Starting up from the Windows [Start] menu

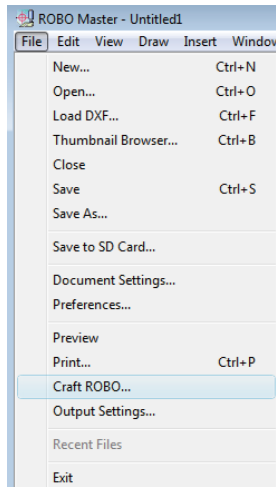
The Craft ROBO Controller can be started up from the Windows [Start] menu. To start it up, select "Start" → "(All) Programs" → "Craft ROBO" → "Craft ROBO Controller".



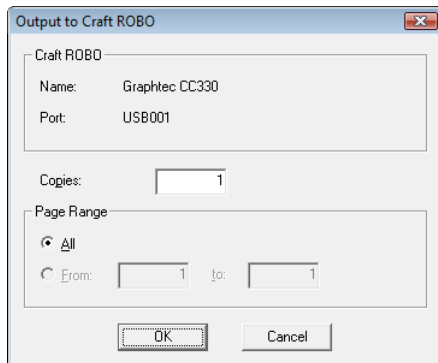
Cutting operation other than test cut cannot be done when you start the controller from the Start menu.

## Starting up from Craft ROBO-compatible software (such as ROBO Master)

- (1) Click [Craft ROBO] in the File menu of ROBO Master.

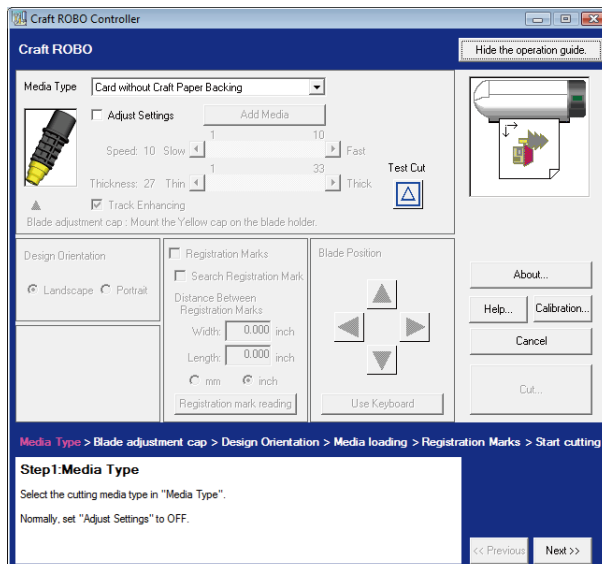


- (2) The "Output to Craft ROBO" window will open. Click [OK] to start up the Craft ROBO Controller. When the Craft ROBO Controller is started up from the ROBO Master, the [Cut] button is displayed, enabling output from the Controller.



The above procedure is an example using the ROBO Master. The Craft ROBO can also be started up from other compatible software applications. Please refer to the user's manual provided with each software application for the start-up procedure.

- (3) When the Craft ROBO Controller is started up, a window similar to the one shown below is displayed.



**CHECKPOINT**

The Craft ROBO Controller settings may be performed automatically by the software that is used to start up the Controller. In this case, the parameters that can be selected may differ from those shown in the above window.

## 3.4 Craft ROBO Controller Operations

This section describes the Craft ROBO Controller's main functions and operating procedures.

### Cutting your design

To perform cutting using the Craft ROBO, the sequence of operations shown below must be performed: [Create data (a design)] → [Make the cutline settings] → [Cut]

The [Create data (a design)] and [Make the cutline settings] operations are performed using Craft ROBO-compatible software such as ROBO Master. For further details, please refer to the ROBO Master User's Manual.

When these operations have been completed, follow the steps below to cut out the design.

- (1) Press the standby switch and confirm that the LED lamp is lit (green).
- (2) Start up the Craft ROBO Controller from Craft ROBO-compatible software such as ROBO Master. (See Section 3.3, "Starting up the Craft ROBO Controller".)
- (3) Select your media type from the "Media Type" drop-down box. (See "Media Type" in Section 3.5, "Craft ROBO Controller Settings".)
- (4) Replace the blade adjustment cap on the blade plunger with a cap in the color that is displayed in the "Blade Adjustment Cap" indicator. (See "Blade Adjustment Cap" in Section 3.5, "Craft ROBO Controller Settings".)
- (5) Adjust the tool conditions.  
Select the "Adjust Settings" check box, and then perform test cutting to determine the optimum conditions by changing the "Speed", "Thickness", "Blade Adjustment Cap" and other settings. (See "Blade Adjustment Cap", "Adjust Settings", and "Test Cut" in Section 3.5, "Craft ROBO Controller Settings".)
- (6) Set the Design Orientation by referring to the illustration on the controller screen. (If the Controller is started up from ROBO Master, the Design Orientation is set automatically.) (See "Design Orientation" in Section 3.5.)
- (7) Load media in the Craft ROBO. (See Section 2.3, "Loading Media Using the Carrier Sheet," and Section 2.4, "Loading Media without Using the Carrier Sheet (CC330-20 Only).")
- (8) If required, change the origin by using the "Blade Position" button. (See "Blade Position" in Section 3.5, "Craft ROBO Controller Settings".)
- (9) Click the "Cut" button to start cutting. (See "Cut" in Section 3.5, "Craft ROBO Controller Settings".)
- (10) If cutting is not performed correctly, adjust the tool conditions.  
Select the "Adjust Settings" check box, and then perform test cutting to determine the optimum conditions by changing the "Speed", "Thickness", "Blade Adjustment Cap" and other settings. (See "Blade Adjustment Cap", "Adjust Settings", and "Test Cut" in Section 3.5, "Craft ROBO Controller Settings".)

### Printing your design on a printer, and then using the Craft ROBO to cut it (CC330-20 only)

To cut out a printed design using the Craft ROBO, the sequence of operations shown below must be followed: [Set Registration Marks] → [Create data (a design)] → [Make the cutline settings] → [Print] → [Cut]

The [Set Registration Marks] → [Create data (a design)] → [Make the cutline settings] → [Print] operations are performed using Craft ROBO-compatible software such as ROBO Master. For further details, please refer to the ROBO Master User's Manual.

When these operations have been completed, a design will have been printed together with registration marks. Follow the steps below to cut the design.

- (1) Press the standby switch and confirm that the LED lamp is lit (green).
- (2) Start up the Craft ROBO Controller from Craft ROBO-compatible software such as ROBO Master. (See Section 3.3, "Starting up the Craft ROBO Controller".)
- (3) Select your media type from the "Media Type" drop-down box. (See "Media Type" in Section 3.5, "Craft ROBO Controller Settings".)
- (4) Replace the blade adjustment cap on the blade plunger with a cap in the color that is displayed in the "Blade Adjustment Cap" indicator. (See "Blade Adjustment Cap" in Section 3.5, "Craft ROBO Controller Settings".)
- (5) Adjust the tool conditions.  
Select the "Adjust Settings" check box, and then perform test cutting to determine the optimum conditions by changing the "Speed", "Thickness", "Blade Adjustment Cap" and other settings. (See "Blade Adjustment Cap", "Adjust Settings", and "Test Cut" in Section 3.5, "Craft ROBO Controller Settings".)
- (6) Set the Design Orientation by referring to the illustration on the controller screen. (If the Controller is started up from ROBO Master, the Design Orientation is set automatically.) (See "Design Orientation" in Section 3.5.)
- (7) Load media in the Craft ROBO. (See Section 2.3, "Loading Media Using the Carrier Sheet," and Section 2.4, "Loading Media without Using the Carrier Sheet (CC330-20 Only).")
- (8) Check that the "Registration Marks" check box has been selected. (See "Registration Marks" in Section 3.5, "Craft ROBO Controller Settings".)
- (9) Click the "Cut" button to start cutting. (See "Cut" in Section 3.5, "Craft ROBO Controller Settings".)
- (10) If cutting is not performed correctly, adjust the tool conditions.  
Select the "Adjust Settings" check box, and then perform test cutting to determine the optimum conditions by changing the "Speed", "Thickness", "Blade Adjustment Cap" and other settings. (See "Blade Adjustment Cap", "Adjust Settings", and "Test Cut" in Section 3.5, "Craft ROBO Controller Settings".)

### < The Search Marks function >

Two steps are required to read the registration marks.

- (a) The Craft ROBO searches for the first registration mark, which will become the reference registration mark, and makes it the origin point. (The first registration mark is the registration mark at the bottom left of the design. It is shown as a green square in the illustration of the plotter in the Craft ROBO Controller.
- (b) Using the first registration mark as the reference registration mark, the Craft ROBO checks the second and third registration marks.

**Note:** If the Craft ROBO failed to read the first registration mark in (a) above, the general registration mark position can be specified manually (see steps (11) to (13) below.)

- (11) Deselect the "Registration Marks" check box, and then use the "Blade Position" function to move the pen to the position of the first registration mark (the registration mark at the bottom left of the design). It is shown as a green square in the illustration of the plotter in the Craft ROBO Controller. (See "Read Marks" in Section 3.5, "Craft ROBO Controller Settings".)
- (12) Click the "Read Marks" button to start manual reading of the registration marks. (See "Read Marks" in Section 3.5, "Craft ROBO Controller Settings".)
- (13) When the registration marks have been read correctly, click the "Cut" button to start cutting. (See "Cut" in Section 3.5, "Craft ROBO Controller Settings".)



## Test Plotting

To reduce media waste, we recommend that you do a test plot when using cutting data for the first time or when you have changed the data. Test plotting allows you to visually confirm, by plotting the cutlines with a ballpoint pen, that the cutting data will be output correctly as the specified solid and folding lines.



To plot cutlines with a ballpoint pen, the optional ballpoint pen plunger is necessary.

- (1) Press the standby switch and confirm that the LED lamp is lit (green).
- (2) Start up the Craft ROBO Controller from Craft ROBO-compatible software such as ROBO Master. (See Section 3.3, "Starting up the Craft ROBO Controller".)
- (3) Select your media type from the "Media Type" drop-down box. (See "Media Type" in Section 3.5, "Craft ROBO Controller Settings".)
- (4) Mount a commercially-available ballpoint pen in the optional ballpoint pen plunger and then mount the pen plunger in the Craft ROBO.
- (5) Set the Design Orientation by referring to the illustration on the controller screen. (If the Controller is started from ROBO Master, the Design Orientation is set automatically.) (See "Design Orientation" in Section 3.5.)
- (6) Load media in the Craft ROBO. (See Section 2.3, "Loading Media Using the Carrier Sheet," and Section 2.4, "Loading Media without Using the Carrier Sheet (CC330-20 Only).")
- (7) If required, change the origin by using the "Blade Position" button. (See "Blade Position" in Section 3.5, "Craft ROBO Controller Settings".)
- (8) Click the "Cut" button to start cutting. (See "Cut" in Section 3.5, "Craft ROBO Controller Settings".)

## Performing a test cut and creating a Media Type setting

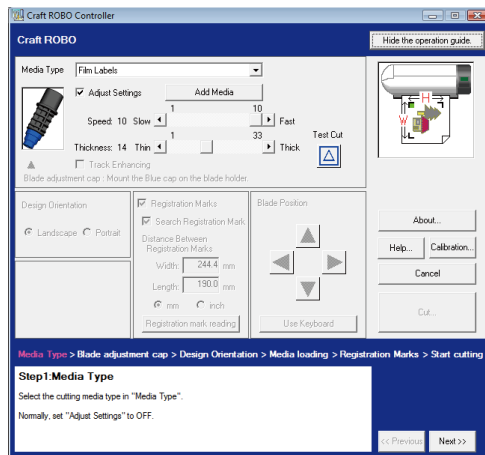
When creating a Media Type setting, the appropriate tool conditions must be found by adjusting the media settings and performing a test cut.

- (1) Press the standby switch and confirm that the LED lamp is lit (green).
- (2) Start up the Craft ROBO Controller from the Windows [Start] menu. (See Section 3.3, "Starting up the Craft ROBO Controller".)
- (3) Select your media type from the "Media Type" drop-down box. (See "Media Type" in Section 3.5, "Craft ROBO Controller Settings".)
- (4) Use "Blade Position" to move the blade to the position where you want to perform a test cut. (See "Blade Position" in Section 3.5, "Craft ROBO Controller Settings".)
- (5) Select the "Adjust Settings" check box, and then perform test cutting to determine the optimum conditions by changing the "Speed", "Thickness", "Blade Adjustment Cap" and other settings. (See "Blade Adjustment Cap", "Adjust Settings", and "Test Cut" in Section 3.5, "Craft ROBO Controller Settings".)
- (6) Click the "Add Media" button, specify the media name and the color of the blade adjustment cap, and then click the [OK] button. Your newly-created setting is added to the "Media Type" list. (See "Add Media" in Section 3.5, "Craft ROBO Controller Settings".)

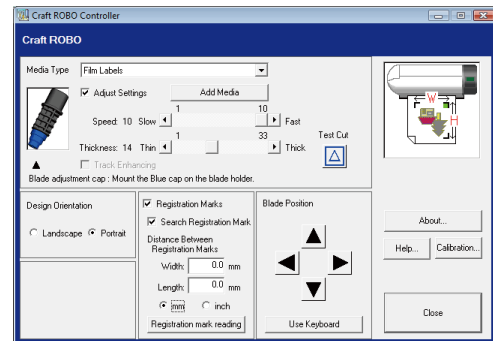
## 3.5 Craft ROBO Controller Settings

When the Craft ROBO Controller is started up, the following screen appears.

**When Craft ROBO-compatible software (Such as ROBO Master) was used to start up the Controller**



**When the Windows [Start] menu was used to start up the Controller**



### Hide/Show the operation guide

..... When the Craft ROBO Controller is started up, an operation guide is displayed at the bottom of the window. The [Hide/Show the operation guide] button turns the operation guide function on/off. Use the [Previous] and [Next] buttons provided within the operation guide to display the screens in succession and check the current settings for each parameter. Follow the step-by-step instructions for easy Craft ROBO setup and operation.

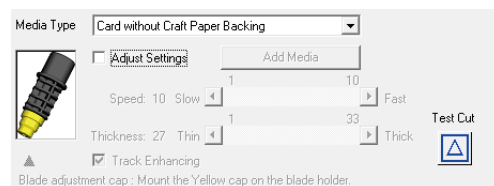
**About** ..... Click to display the version information of the Craft ROBO Controller currently in use.

**Help** ..... Click to display Quick Help descriptions of the various Craft ROBO functions.

**Cancel** ..... Click to exit the Craft ROBO Controller.

**Cut** ..... Click to start cutting with the Craft ROBO. If your model is the CC330-20 and the automatic reading of registration marks is specified, the registration marks are read first. When the registration marks have been read successfully, the Craft ROBO starts cutting.

**Media Type** ..... Use this drop-down box to select the type of media to be cut.



The following 8 Media Type parameters are provided:

#### <Graphtec media>

- Card without Craft Paper Backing\*1
  - Card with Craft Paper Backing
  - Vinyl Sticker\*1
  - Film Labels\*1
  - Magnetic Sheet\*1
- \*1: CC330-20 only

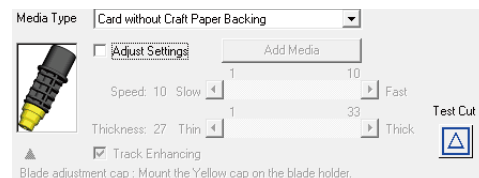


All of the above parameters are for media that is supplied by Graphtec. When using Graphtec-supplied media, be sure to select the correct parameter for the media that you are using. For further details on Graphtec-supplied media, please see the Graphtec web site.

## &lt;Other&gt;

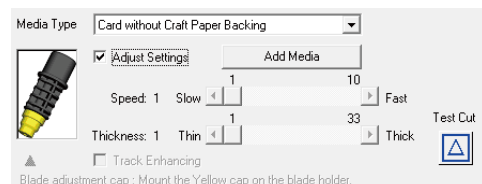
- Thick Media: Select this parameter when using Kent paper (inkjet, laser or similar paper).
- Thin Media: Select this parameter when using standard paper.
- Pen: Select this parameter when a ballpoint pen has been mounted in the Craft ROBO. The ballpoint pen is primarily used for test plotting before cutting.

**Blade Adjustment Cap ..** The Blade Adjustment Cap indicator shows the most suitable blade adjustment cap color for the media that has been selected from the "Media Type" drop-down box. Attach the blade attachment cap in the color shown to the blade plunger before cutting that media.

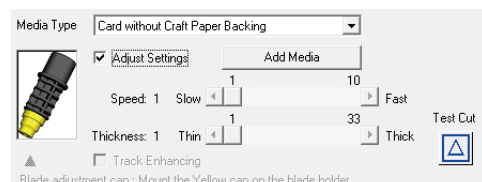


Only the tip of the blade protrudes from the blade plunger. The blade adjustment cap color controls the blade length (the protruding length varies according to the color of the cap). The color selection is mostly determined by the thickness of the media to be cut.

**Adjust Settings .....** If the results of the test cutting indicate that the conditions need to be adjusted, select the "Adjust Settings" check box. As shown in the screen below, "Speed", "Thickness", "Test Cut" and "Add Media" are displayed. These parameters are disabled when the "Adjust Settings" box is not checked.



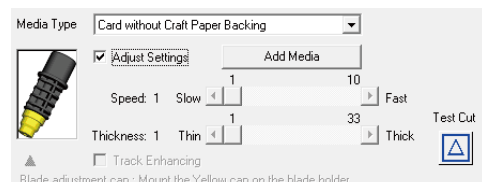
**Speed.....** Specifies the cutting speed.



Selecting "Fast" increases the cutting speed, and selecting "Slow" reduces the speed. The slower the cutting speed, the higher the cutting quality. The speed can be adjusted in 10 steps for the CC330-20, and 7 steps for the CC300-20.

**Note:** If a value of 31 or higher has been specified for "Thickness", the speed will be reduced in order to maintain an acceptable quality level.

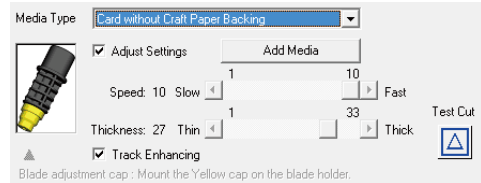
**Thickness.....** Specifies the thickness of the media to be cut.



33 levels can be specified.

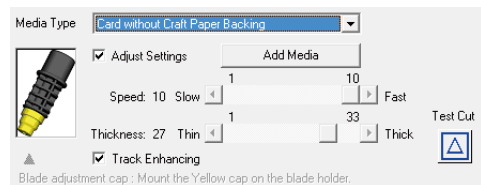
**Note:** If a value of 31 or higher has been specified for "Thickness", the speed will be reduced in order to maintain an acceptable quality level.

**Track Enhancing.....** Track enhancing refers to the action of moving the media back and forth several times before cutting is started to improve the quality of cutting. It is performed automatically when the thickness exceeds a certain value.



Keep this function on during normal use. If you need to shorten the cutting time, this function may be turned off provided you have verified that cutting is performed normally.

**Test Cut** ..... Perform test cutting to check the cutting quality.

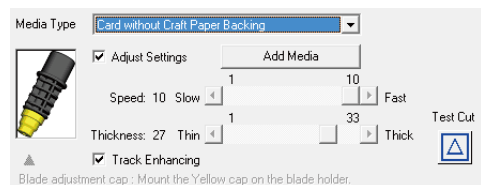


Use the [Blade Position] buttons to move the blade to the position at which test cutting is to be performed, and then click the [Test Cut] button. A 1cm x 1 cm test pattern will be cut. The tool conditions are appropriate when the results of test cutting indicate that the media is cut cleanly with faint traces of the blade on the backing material (liner or carrier sheet). If cutting has not been performed correctly, such as when the backing material itself is cut or uncut areas of film remain, change the blade adjustment cap to one of a different color. Alternatively, change the "Media Type" parameter or change the "Thickness" setting.

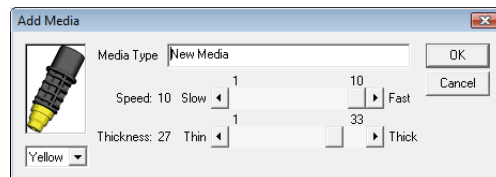


- The quality of the cutting results will vary, depending on the type of media to be cut and on other factors.
- If you plan to cut media that you have never used before, always be sure to perform test cutting first.

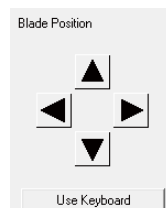
**Add Media** ..... Click the "Add Media" button to open the "Add Media" window.



A custom media type can be created by entering its settings and name.



**Blade Position** ..... Use these buttons to move the position of the blade or the pen (ballpoint pen) mounted in the Craft ROBO.

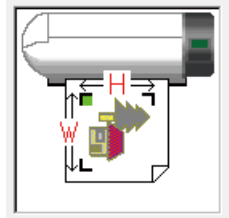


When the left-hand or right-hand buttons are pressed, the blade or the pen (ballpoint pen) is moved to the left or right. When the up or down buttons are pressed, the media is moved. Clicking the [Use Keyboard] button allows the arrow keys on the keyboard to be used in the same way as the [Blade Position] buttons.

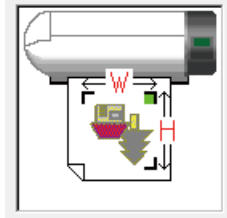
**Design Orientation** ..... Select "Landscape" for a design where the media is positioned horizontally and "Portrait" where the media is positioned vertically. The orientation is automatically set when output is performed from the ROBO Master.



If you change your selection, the illustration in the Craft ROBO Controller also changes.

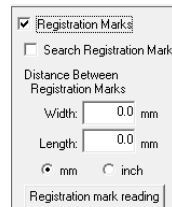


Landscape orientation



Portrait orientation

**Registration Marks** ..... Select the "Registration Marks" check box when you want to cut a design that has been printed out on a printer.  
(Displayed only for the CC330-20.)



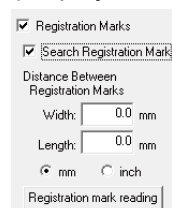
Registration marks are used when cutting will be performed on a printed design. Select the "Registration Marks" check box to enable the reading of registration marks.



If the Craft ROBO-compatible software (such as ROBO Master) was used to start up the Craft ROBO Controller, this parameter is automatically selected and cannot be changed.

### Search Registration Marks

..... Search Marks is a function that automatically searches for registration marks within a fixed range from the current position of the blade/pen toward the center of the media.  
(Displayed only for the CC330-20.)



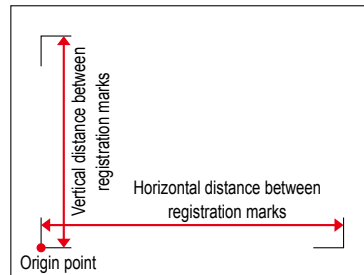
- This parameter cannot be used if the Craft ROBO Controller is started up from Craft ROBO-compatible software (such as ROBO Master) and registration marks will not be used.
- Keep this function on (checkbox selected) during normal use. When the Search Marks function is on, the registration marks are automatically searched for and read right before cutting. When the registration marks are read normally, cutting is performed.

The registration marks may not be automatically found if they are not located in the areas that are normally used for printing registration marks. In this case, deselect the Search Marks checkbox and perform manual reading of the registration marks.

(See "Read Marks" in this section for details on how to perform manual reading of registration marks.)

### Notes on Registration Marks

Registration marks are reference marks that are used to align the plotter's cutting position with an image that was printed out on a printer. Registration marks are printed along with the design, and the Craft ROBO reads them with its registration mark sensor to ensure alignment of the printed image and the cutline. The registration marks are shaped like the corners of a rectangle and are printed around the design at three of the four corners.

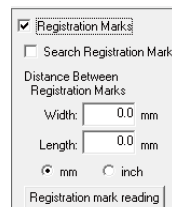


#### CHECKPOINT

- When registration marks are used, avoid placing them on or in the vicinity of the printed image wherever possible.
- When registration marks are used, we recommend that you use an inkjet printer. If a laser printer is used for output, the printed image may become distorted due to paper skew, and may cause misalignment of the cutting position.

### Distance Between Registration Marks

..... These controls are displayed when the "Search Registration Mark" check box is not selected. The distance between the registration marks is the distance from the corner of one registration mark to the corner of the next registration mark. (Displayed only for the CC330-20.)

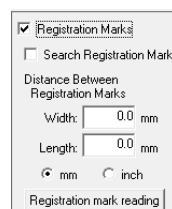


#### CHECKPOINT

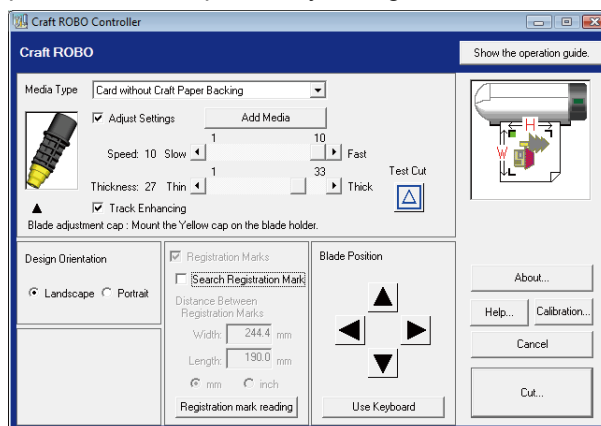
- In most cases, the settings are made automatically from the Craft ROBO-compatible software.
- If the Craft ROBO-compatible software (such as ROBO Master) was used to start up the Craft ROBO Controller, these settings are made automatically and cannot be changed.

### Registration mark reading

..... This button is enabled when the "Search Registration Mark" check box is not selected. (Displayed only for the CC330-20.)

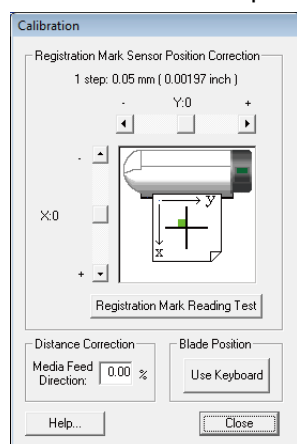


- (1) Use the [Blade Position] buttons to move the blade or pen (ballpoint pen) within the registration mark range. The registration mark range is displayed as a green square in the illustration at the upper right corner of the Controller. The position of the square may change based on the orientation of the design.



- (2) Click the Registration mark reading button to start manual reading of the registration marks.

**Calibration**..... Click this button to open the [Calibration] window.



### Registration Mark Sensor Position Correction (Displayed only for the CC330-20.)

This function is used to adjust the cut position when the printed image and the cut position are misaligned. This operation enables the positions read by the registration mark sensor to be adjusted to the correct registration mark positions.



It is normally not necessary to perform this correction.

Follow the procedure described below to perform Registration Mark Sensor Position Correction.

- (1) Mount the blade plunger in the Craft ROBO.
- (2) For the "Registration Mark Reading Test", use a sheet of paper with a cross drawn on it. Follow the procedure described below to prepare a sheet of paper with a cross drawn on it.

#### <If ROBO Master has been installed in your computer>

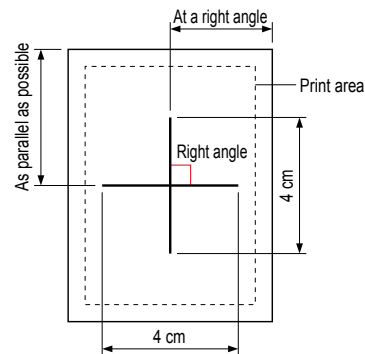
Print out the "RegistrationMarkReadingTestSheet" that is provided with ROBO Master.

#### <If ROBO Master has not been installed in your computer>

Prepare a sheet of paper with a cross drawn on it to use for the "Registration Mark Reading Test", making sure that all the following conditions are met.



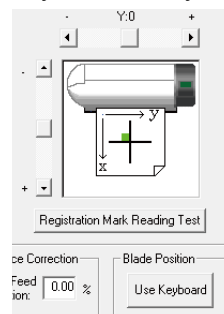
- The sheet must be white, non-glossy, A4 size paper.
- Draw a cross with black lines 0.5 to 1 mm thick and at least 4 cm in length. The two lines must intersect each other at a right angle as shown below.



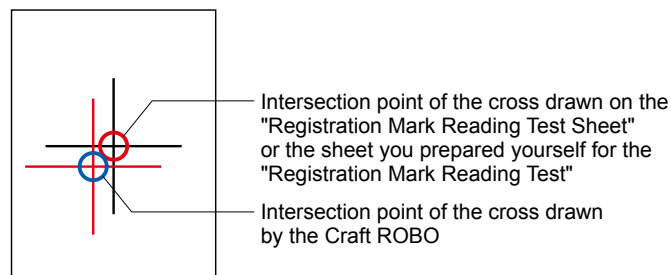
### CHECKPOINT

Use a sheet of white, non-glossy, A4 size paper for the Registration Mark Reading Test, and make sure that the blade plunger is mounted in the Craft ROBO. Depending on the type of media that is being used, the registration mark may not be read correctly. Wherever possible, use a sheet of the actual media (paper, vinyl film) that you plan to use.

- (3) From the "Media Type" drop-down box of the Craft ROBO Controller, select the parameter that corresponds to the media used in the "Registration Mark Reading Test."
- (4) Load the "RegistrationMarkReadingTestSheet" that you printed out from ROBO Master or the sheet that you prepared yourself for the "Registration Mark Reading Test" in the Craft ROBO. Next, open the "Calibration" window and move the blade to the green square part of the diagram. Click [Use Keyboard] in the "Blade Position" section of the Controller, and use the arrow keys on the keyboard to move the blade.



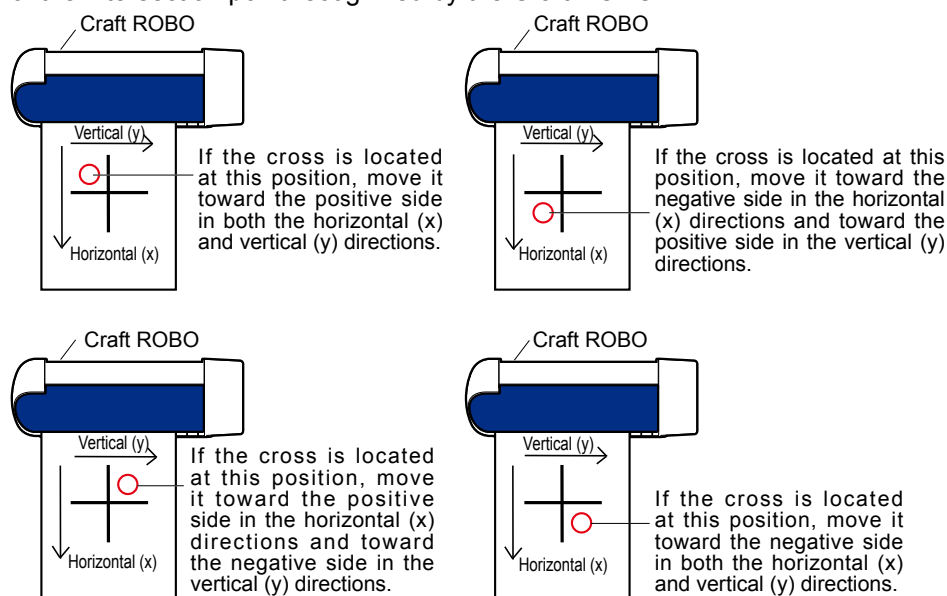
- (5) Click the [Registration Mark Reading Test] button. After the Craft ROBO has read the printed cross, it will use the mounted blade to draw a cross.





If the position of the intersection point recognized by the Craft ROBO is not aligned with that of the printed cross, correct it as specified below. Use the vertical (y) or horizontal (x) scroll bar to specify a correction value. The correction value must be in the range of -40 to 40. One step represents 0.05 mm. For example, if 20 is specified as the correction value, the line drawn by the pen (ballpoint pen) moves 1 mm.

If the position of the intersection point recognized by the Craft ROBO is not aligned with that of the printed cross, set a correction value in accordance with the figures shown below. The red circle in each diagram denotes the position of the intersection point recognized by the Craft ROBO.



### Blade Position

(Displayed only for the CC330-20.)

Clicking the [Use Keyboard] button allows the arrow keys on the computer keyboard to be used in the same way as the [Blade Position] buttons.

### Distance Correction

When the Craft ROBO moves the media, the distance by which the media is fed may not always be exactly as expected, depending on the media thickness and cutting speed. Distance Correction is used to account for such an error. In the range of -2% to +2%, enter a negative value if the fed distance is greater than the expected distance, or a positive value if the fed distance is less than the expected distance. The correction value may be calculated from the equation below.

$$\left( 1 - \frac{\text{Actually moved distance}}{\text{Distance to be moved}} \right) \times 100 = \text{correction value}$$

### Concrete example

If the media needs to be moved 20 cm and the distance actually moved by the Craft ROBO is 19.8 cm, then

$$(1 - 19.8 \div 20) \times 100 = 1$$

Therefore, enter the value 1 for correction.



It is not normally necessary to perform correction. When registration marks are used, correction is performed automatically.

## 3.6 Error Messages

If any of the following error messages is displayed on your computer screen, follow the instructions that have been provided for each message.

**The USB port is currently in use. Please wait ten seconds, and then try again.**

→ Follow the instructions in the message.

**Cannot communicate with the Craft ROBO. Check that the USB cable is connected correctly, press the Craft ROBO's standby switch, and then confirm that its lamp is lit (blue).**

→ Follow the instructions in the message.

**Craft ROBO communication error. Press the standby switch twice.**

→ Follow the instructions in the message.

**GITKUSBP.DLL could not be found, and so the Craft ROBO Controller could not be started. Please reboot your computer or re-install the Craft ROBO Controller.**

→ Follow the instructions in the message.

To install the software again, first uninstall the Craft ROBO Controller currently installed. If the problem is not solved, download the latest version of the Craft ROBO Controller from the Craft ROBO website and install it.

**The GITKUSBP.DLL functions could not be found, and so the Craft ROBO Controller could not be started. Please reboot your computer or re-install the Craft ROBO Controller.**

→ Follow the instructions in the message.

To install the software again, first uninstall the Craft ROBO Controller currently installed. If the problem is not solved, download the latest version of the Craft ROBO Controller from the Craft ROBO website and install it.

**The value specified for the horizontal (vertical) distance between the registration marks exceeds the specifiable range. Please specify a distance in the range X to X mm. (Displayed only for the CC330-20.)**

→ Follow the instructions in the message.

**The value specified for the feed direction exceeds the specifiable range. Please specify a distance in the range of X to X %.**

→ Follow the instructions in the message.

**Registration mark reading failure. Please reload the medium. (Displayed only for the CC330-20.)**

→ Follow the instructions in the message.

**Registration mark reading failed. Reload the media, and then click the [Cut] button once again. If the registration marks are still not read correctly, deselect the "Search Marks" check box, move the blade within the green square, and then click the "Read Marks" button. (Displayed only for the CC330-20.)**

→ Follow the instructions in the message.

**The Craft ROBO Controller is already active. Please shut the controller down and perform the operation once again .**

→ This message is displayed when you duplicate starting up the Craft ROBO Controller. Exit the currently operating Craft ROBO Controller and restart it to continue operation.

**The design orientation has not been specified correctly. Please check the "Design Orientation" setting in your application program.**

- Make the setting once again. If the problem is still not resolved, consult the manufacturer of the application software that you are using.

**The distances between the registration marks have not been specified correctly. Please check the "Distance between Registration Marks" setting in your application program. (Displayed only for the CC330-20.)**

- Make the setting once again. If the problem is still not resolved, consult the manufacturer of the application software that you are using.

**The specified Media Type cannot be used. Please specify a different Media Type.**

- The default Media Type has been specified, or characters ( / : \* ? < > ) that cannot be used for the Media Type name have been specified. Please enter the Media Type name once again.

# CHAPTER 4. CUTTING DATA SAVED ON SD CARD

You can cut the data stored on an SD memory card using ROBO Master by operating the Craft ROBO from the control panel.

## 4.1 Introduction

You can cut the data saved on an SD card without connecting the Craft ROBO to a computer. Insert the SD card that contains the cutting data saved using ROBO Master and perform cutting operations from the control panel of the Craft ROBO.

For details about saving cutting data to an SD card, please refer to the ROBO Master User's Manual.

### CHECKPOINT

- The Craft ROBO can only read the GSP format data, saved using ROBO Master's "Save to SD Card" command. Files in other formats can be displayed on the screen of the control panel but cannot be cut.
- The Craft ROBO only reads the files stored in the "Graphtec" folder located in the root directory of SD cards. Files saved in other locations cannot be read even if they are in GSP format.
- Only SD memory cards are supported. SDHC cards are not supported.
- The Craft ROBO can recognize up to 2 GB of data area.
- Only FAT 12 and FAT 16 formats are supported.
- For a long file name, the first 16 characters are scroll displayed on the screen of the control panel. 2-byte characters cannot be displayed.
- The Craft ROBO cannot format SD cards or write data on them.
- The Craft ROBO ignores the data sent from a computer while cutting the data on an SD card. Send the data from the computer after the cutting operation from the SD card is finished.
- Be sure to insert or remove the SD card when <Load w/ Carrier> or <Load Media> is displayed on the screen of the control panel.
- Not all SD cards are supported.
- Graphtec Corporation assumes no liability for damages such as data loss resulting from the use of the product.
- <File Select> and <Settings> are displayed only when the SD card is set in the SD card slot, and are applicable only for the data saved on the SD card.

## 4.2 Operations

You can cut the data saved on an SD card with the tool conditions set in the previous cutting, or after setting new tool conditions. In any case, it is necessary to first perform operations using Craft ROBO-compatible software such as ROBO Master.

### Cutting your design

The sequence of operations is as follows:

[Create data (a design)] → [Make the cutline settings] → [Save data to SD card] → [Cut].

The [Create data (a design)] → [Make the cutline settings] → [Save data to SD card] operations are performed using Craft ROBO-compatible software such as ROBO Master. For further details, please refer to the ROBO Master User's Manual.

When these operations have been completed, follow the procedures described in "Cutting with the tool conditions set in the previous cutting" or "Cutting with new tool conditions" to cut out the design.

### Printing your design on a printer, and then using the Craft ROBO to cut it

The sequence of operations is as follows:

[Set Registration Marks] → [Create data (a design)] → [Make the cutline settings] → [Save data to SD card] → [Print] → [Cut].

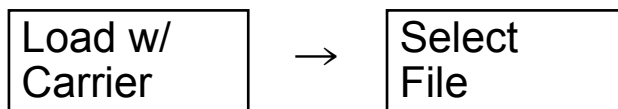
The [Set Registration Marks] → [Create data (a design)] → [Make the cutline settings] → [Save data to SD card] → [Print] operations are performed using Craft ROBO-compatible software such as ROBO Master. For further details, please refer to the ROBO Master User's Manual.

When these operations have been completed, follow the procedures described in "Cutting with the tool conditions set in the previous cutting" or "Cutting with new tool conditions" to cut out the design.

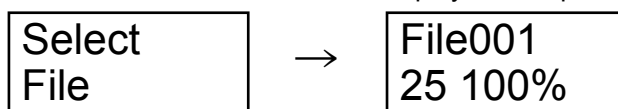
### Cutting with the tool conditions set in the previous cutting

Follow the procedure below to cut the data saved on an SD card using the tool conditions set for the previous cutting operation from the control panel or the Craft ROBO Controller.

- (1) Press the standby switch and confirm that the LED lamp is lit (green).
- (2) Insert the SD card into the SD card slot.
- (3) Load the media, and press [ENTER]. (See Section 2.3, "Loading Media using the Carrier Sheet," and Section 2.4, "Loading Media without Using the Carrier Sheet (CC330-20 Only).")



- (4) Make sure that <Select File> is displayed, and press [ENTER].

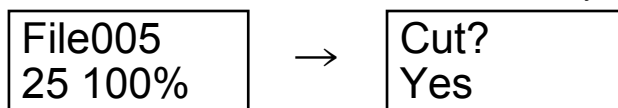


e.g. "File 001" is displayed



If <SD Error> is displayed, see Section 4.3, "Error Messages."

- (5) Press ◀ or ▶ to select the file name of the data you want to cut, and press [ENTER].

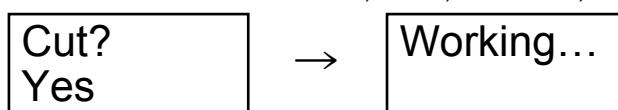


e.g. "File 005" is displayed



- The file name is displayed in the upper line, and the force and scale set for the previous cutting operation are displayed in the lower line on the file selection screen.
- If <No File> or <Unknown File> is displayed, see Section 4.3 "Error Messages."

- (6) Press ◀ or ▶ to select <Yes>, <No>, or <Area>, and press [ENTER].



<Yes>: The Craft ROBO cuts the media from the point where the tool is located. If the cutting data includes registration marks, the Craft ROBO searches the marks from the origin point automatically, detects the marks, and then cuts the media.

<No>: Cutting is canceled.

<Area>: The Craft ROBO cuts the media after confirming the cutting area.

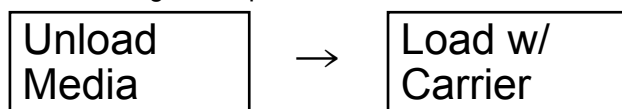
### <Confirming the cutting area>

If you select <Area>, the Craft ROBO moves the tool to the last coordinate of the cutting data and checks if the cutting area is within the media size. If the cutting data includes registration marks, the Craft ROBO searches the marks from the origin point automatically, detects the marks, moves the tool to the last coordinate of the cutting data, and confirms the cutting area.

<OFFSCALE>: The cutting area exceeds the media size. Press [ENTER] to display <Cut?>. To start cutting, press ◀ or ▶ to select <Yes>, and press [ENTER]. To cancel cutting, press ◀ or ▶ to select <No>, and press [ENTER].

<PRESS ENTER>: The cutting area is within the media size. Press [ENTER] to display <Cut?>. To start cutting, press ◀ or ▶ to select <Yes>, and press [ENTER]. To cancel cutting, press ◀ or ▶ to select <No>, and press [ENTER].

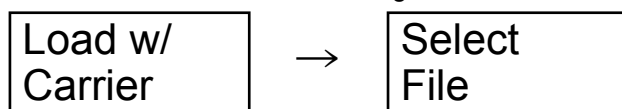
- (7) When cutting is complete, make sure that <Unload Media> is displayed, and press [ENTER].



The media is output toward the front of the main unit.

### Cutting with new tool conditions

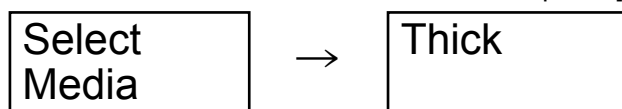
- (1) Press the standby switch and confirm that the LED lamp is lit (green).
- (2) Insert the SD card into the SD card slot.
- (3) Load the media, and press [ENTER]. (See Section 2.3, "Loading Media using the Carrier Sheet," and Section 2.4, "Loading Media without Using the Carrier Sheet (CC330-20 Only).")



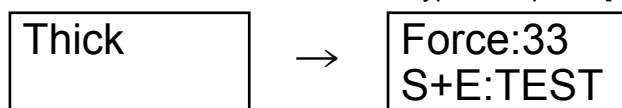
- (4) Press ◀ or ▶ to select <Setting>, and press [ENTER].



- (5) Press ◀ or ▶ to select <Select Media>, and press [ENTER].



- (6) Press ◀ or ▶ to select the media type, and press [ENTER].



You can select the media type from <Thick>, <Thin>, <Film>, or <Pen>. The preset force for the selected media type is displayed.

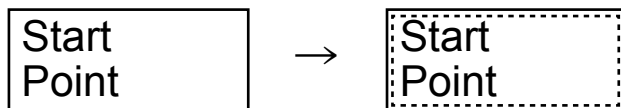
- (7) As necessary, press ◀ or ▶ to adjust the force, perform a test cut, and then press [ENTER].



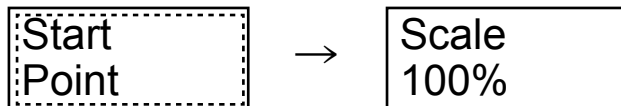
**CHECKPOINT**

- To perform a test cut, press [SHIFT] and [ENTER] on the control panel at the same time.
- The force setting remains effective until the media type is selected again. If you cut using the Craft ROBO Controller, however, the force setting you set in the Controller is used and it remains effective until the media type is selected again.

- (8) Press ◀ or ▶ to select <Start Point>, and press [ENTER].



- (9) Press ◀, ▶, or [SHIFT] to set the start point, and press [ENTER].



Use the following keys on the control panel to move the tool to the point you want to set as the start point (origin point).

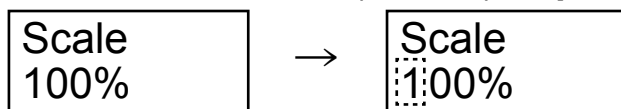
◀: Moves the tool to the left.

▶: Moves the tool to the right.

[SHIFT] + ◀: Feeds the media toward the front of the main unit.

[SHIFT] + ▶: Feed the media toward the back of the main unit.

- (10) Press ◀ or ▶ to set the start point, and press [ENTER].



- (11) Press ◀, ▶, to select the scale, and press [ENTER].



◀: Reduces the size by 25 %.

▶: Enlarges the size by 25 %.

You can set the scale from 50 % to 200 %.

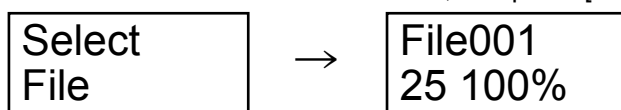
**CHECKPOINT**

When cutting is complete, the scale setting returns to 100%.

- (12) Press ◀ or ▶ to select <Go Back>, and press [ENTER].



- (13) Press ◀ or ▶ to select <Select File>, and press [ENTER].

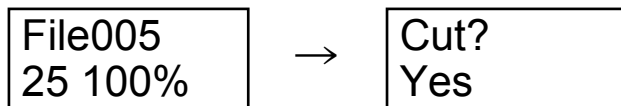


e.g. "File 001" is displayed

**CHECKPOINT**

If <SD Error> is displayed, see Section 4.3, "Error Messages."

- (5) Press ◀ or ▶ to select the file name of the data you want to cut, and press [ENTER].



e.g. "File 005" is displayed

#### CHECKPOINT

- The file name is displayed in the upper line, and the force and scale set for the previous cutting operation are displayed in the lower line on the file selection screen.
- If <No File> or <Unknown File> is displayed, see Section 4.3, "Error Messages."

- (6) Press ◀ or ▶ to select <Yes>, <No>, or <Area>, and press [ENTER].



<Yes>: The Craft ROBO cuts the media from the point where the tool is located. If the cutting data includes registration marks, the Craft ROBO searches the marks from the origin point automatically, detects the marks, and then cuts the media.

<No>: Cutting is canceled.

<Area>: The Craft ROBO cuts the media after confirming the cutting area.

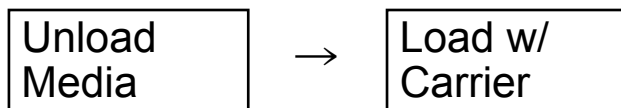
#### <Confirming the cutting area>

If you select <Area>, the Craft ROBO moves the tool to the last coordinate of the cutting data and checks if the cutting area is within the media size. If the cutting data includes registration marks, the Craft ROBO searches the marks from the origin point automatically, detects the marks, moves the tool to the last coordinate of the cutting data, and confirms the cutting area.

<OFFSCALE>: The cutting area exceeds the media size. Press [ENTER] to display <Cut?>. To start cutting, press < or > to select <Yes>, and press [ENTER]. To cancel cutting, press ◀ or ▶ to select <No>, and press [ENTER].

<PRESS ENTER>: The cutting area is within the media size. Press [ENTER] to display <Cut?>. To start cutting, press < or > to select <Yes>, and press [ENTER]. To cancel cutting, press ◀ or ▶ to select <No>, and press [ENTER].

- (7) When cutting is complete, make sure that <Unload Media> is displayed, and press [ENTER].



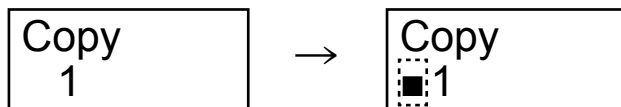
The media is output toward the front of the main unit.

#### Cutting the same image repeatedly (Copy)

You can cut the same image repeatedly by setting the number of copies.

- (1) Follow the steps 1 to 4 in "Cutting with new tool conditions."

- (2) Press ◀ or ▶ to select <Copy>, and press [ENTER].



- (3) Press ◀ or ▶ to set the number of times you want to cut the same image, and press [ENTER].





You can set from 1 to 99 copies.

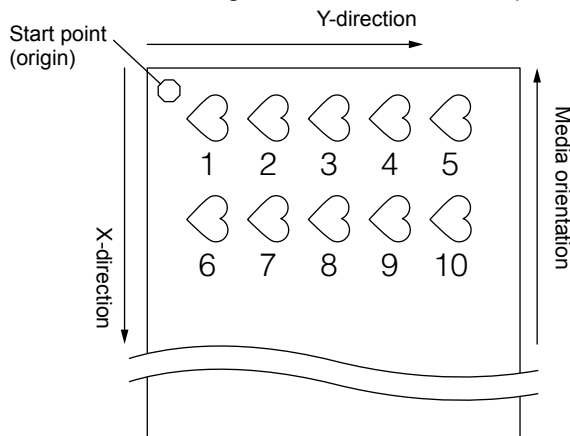
### <The Copy function>

If you set the number of copies, the Craft ROBO cuts the same image repeatedly as shown below.

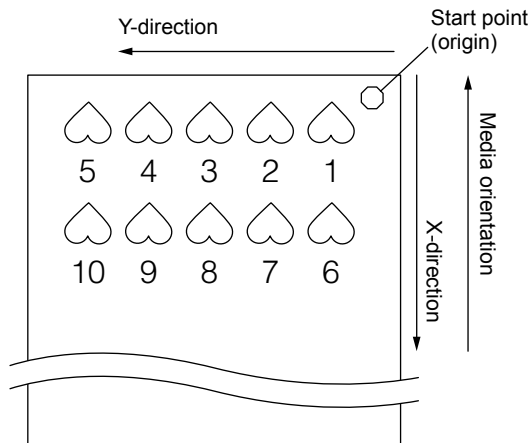
The number of images that can be cut to the Y-direction and X-direction varies depending on the sizes of the image and media.

Example: Copy is set to 10

- When the design orientation is landscape:



- When the design orientation is portrait:



### CHECKPOINT

- When cutting is complete, the number of copies returns to 1.
- If you set the number of copies to more than 2, the <Start Point> setting is canceled and cutting starts from the origin shown in the illustration above.
- Registration marks are ignored when cutting using the Copy function.
- If the Craft ROBO detects that the output of the images you set using the Copy function exceeds allowable cutting area, <OFFSCALE> is displayed. If you want to cut without changing the setting, press [ENTER], then press ◀ or ▶ to select <Yes> in the <Cut?> screen, and then press [ENTER] to start cutting. If you want to cancel cutting, press [ENTER], then ◀ or ▶ to select <No> in the <Cut?> screen, then modify your setting in the <Setting> screen by following steps 2 and 3.

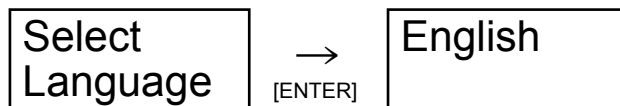
(4) Follow steps 12 to 16 in "Cutting with new tool conditions."

### Changing the LCD language

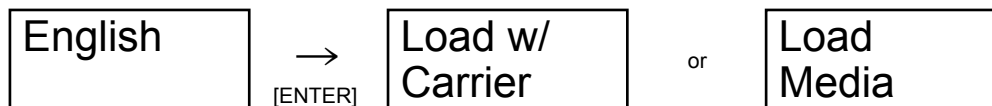
You can switch the LCD language between Japanese and English.

(1) Press the standby switch and confirm that the LED lamp is lit (green).

(2) Press ◀ or ▶ to select <Select Language>, and press [ENTER].



(3) Press ◀ or ▶ to select the language, and press [ENTER].



## 4.3 Error Messages

If any of the following error messages is displayed, follow the instruction indicated for each message.

<SD Error>

→SD card is not set. Insert the SD card into the SD card slot properly.

<No File>

→No file has been found in the "Graphtec" folder of the SD card. Save the cutting data to the SD card properly, then insert the SD card into the SD card slot.

<Unknown File>

→You have selected a file in a format other than GSP. Insert an SD card with the GSP format files saved.

<RMS Error>

→Registration mark detection cannot be performed correctly. Press [ENTER], make sure that <Unload Media> is displayed, and press [ENTER] again. Then set the media again.

# APPENDIX

## Appendix A. Standard Specifications

Item	CC300-20	CC330-20
	Specification	
Feeding method	Grit-rolling	
Drive	Stepping motor	
Cutting range	Maximum: 200 x 305 mm (in expanded mode)	Maximum: 200 x 1000 mm (in expanded mode) Limited, however, to film media only (0.1 mm or less in thickness, liner-included thickness of 0.3 mm or less)
Effective sheet width	Max. 270 mm Note: Use of the carrier sheet is necessary.	A4 size supported Loadable sheet width: maximum 270 mm, minimum 210 mm unless the carrier sheet is used
Operating speed	10 - 70 mm per second (in 10 mm steps; 7 levels selectable)	10 - 80 mm per second (in 10 mm steps; 10 levels selectable)
Mechanical step size	0.05 mm	
Program step size	0.05 mm	
Repetition accuracy	0.2 mm/300 mm	
Loadable number of blades/pens	1	
Tools	Blade with dedicated blade holder General-purpose ballpoint pen (used only with the ballpoint pen holder) (not supplied)	
Media types that can be cut	Note: Use of the carrier sheet is necessary for all types of media. Kent paper (inkjet or laser paper up to 157 g/m <sup>2</sup> ), drawing paper, postcards, scrapbooking paper; inkjet photo paper  * Not all types of media can be cut	Film media 0.1 mm in thickness, liner-included thickness of 0.3 mm or less (but excluding high-intensity reflective sheets), Kent paper (inkjet or laser paper up to 157 g/m <sup>2</sup> ), drawing paper, postcards, scrapbooking paper; inkjet photo paper  * Not all types of media can be cut
Interface	USB 2.0 (Full speed)	
Registration mark detection function	Not available	Available
LCD	8 characters x 2 lines	
SD card	Read only up to 2 GB (SDHC not supported)	
Rated power supply	Dedicated adapter, +24 V DC (1.25 A)	
Power consumption	12 W	
Working environment	10 to 35°C, 35 to 75% R.H. (Non-condensing)	
Guaranteed operating environment	16 to 32°C, 35 to 70% R.H. (Non-condensing)	
External dimensions (W x D x H)	Approx. 420 mm x 140 mm x 112 mm (excluding protrusions)	
Weight	Approx. 2 kg	

# INDEX

## A

About .....	3-10
AC adapter .....	1-1
AC adapter jack .....	1-2
Add Media .....	3-12
Adjust Settings.....	3-11
Allowable cutting area.....	2-9
Carrier sheet.....	2-7

## B

Ballpoint pen	
Acceptable.....	2-15
Mounting.....	2-16
Ballpoint pen plunger.....	2-16
Blade Adjustment Cap.....	3-11
Changing .....	2-13
Blade adjustment caps and media selection .....	2-12
Blade plunger .....	1-1
Construction .....	2-12
Mounting.....	2-14
Blade Position.....	3-12, 3-17

## C

Calibration .....	3-15
Cancel .....	3-10
Carrier Sheet.....	1-1, 2-3
Concrete example .....	3-17
Connecting and Turning on the Power.....	2-1
Connecting to a Computer.....	2-2
Copyright .....	i
Craft ROBO Controller	
Installing .....	3-1
Operations.....	3-7
Settings .....	3-10
Starting.....	3-5
System Requirements .....	3-1
Craft ROBO Software CD-ROM .....	1-1
Creating a Media Type setting .....	3-9
Cut.....	3-10
Cutting mat .....	1-2
Cutting your design.....	3-7

## D

Design Orientation.....	3-13
Distance Between Registration Marks.....	3-14
Distance Correction .....	3-17

## E

Error Messages .....	3-18
----------------------	------

## F

Federal Communications Commission Radio	
Frequency Interference Statement .....	i
Front guide.....	1-2

## G

Guideline .....	1-2
-----------------	-----

## H

Help .....	3-10
Hide/Show the operation guide .....	3-10

## I

Items.....	1-1
------------	-----

## M

Media loading method .....	2-8
Media rollers.....	1-2
Media Type .....	3-10

## N

Notes on this Manual.....	i
---------------------------	---

## P

Parts and Functions.....	1-2
Performing a test cut.....	3-9
Power cable .....	1-1
PREFACE .....	i
Printing your design on a printer, and then using the	
Craft ROBO to cut it (CC330-20 only) .....	3-7
PRIOR TO USE .....	1-1
Push roller .....	1-2

## Q

Quick Application Guide .....	1-1
-------------------------------	-----

## R

Registered Trademarks.....	i
Registration mark reading .....	3-14
Registration Marks.....	3-13
Registration Mark Sensor Position Correction.....	3-15

## S

Search Registration Marks .....	3-13
---------------------------------	------

Setup Instruction Sheet .....	1-1
Standard Specifications .....	A-1
Standby switch .....	1-3
Starting up the installer .....	3-1

**T**

Test Cut .....	3-12
Test Plotting .....	3-9
Thickness .....	3-11
Tool carriage .....	1-2
Tool holder .....	1-2
Track Enhancing .....	3-11

**U**

USB cable .....	1-1
USB interface connector .....	1-2

**W**

Warning .....	i
What to Do if This Happens .....	2-17

PREFACE

CONTENTS

CH 1. PRIOR TO USE

CH 2. CONNECTION AND PREPARATION

CH 3. CRAFT ROBO CONTROLLER

CH 4. CUTTING DATA SAVED ON SD CARD

APPENDIX A

INDEX

The specifications, etc., in this manual are  
subject to change without notice.

---

**CC300m-UM-151**

February 3, 2009 2nd edition

**GRAPHTEC CORPORATION**

---

PREFACE

CONTENTS

CH 1. PRIOR TO USE

CH 2. CONNECTION AND PREPARATION

CH 3. CRAFT ROBO CONTROLLER

CH 4. CUTTING DATA SAVED ON SD CARD

APPENDIX A

INDEX

## GRAPHTEC CORPORATION

503-10 Shinano-cho, Totsuka-ku,  
Yokohama 244-8503, Japan  
Tel : +81 (045) 825-6250  
Fax: +81 (045) 825-6396  
Email : [info@graphteccorp.com](mailto:info@graphteccorp.com)  
Web : [www.graphteccorp.com](http://www.graphteccorp.com)

Printed in Japan